

THE ARCHITECTURAL
REVIEW, FEBRUARY,
1903, VOLUME XIII.
NO. 75.



HOUSEBREAKING IN THE STRAND.
DRAWN BY MUIRHEAD BONE.

Architecture and the Royal Academy.

A DISCUSSION. V. (*Conclusion.*)

I. BY ALEXANDER GRAHAM.

THE question of devising some satisfactory mode of representing architecture on the walls of an exhibition gallery seems as far from solution as it was in earlier days, when the Royal Academy took up its new quarters in Burlington House, painting and sculpture finding ample accommodation in lordly galleries, while architecture was compulsorily housed in a small chamber of anything but lordly proportions. Year after year comes the same lament that this Architectural Room is a failure, the contents being uninteresting to the student, and equally unattractive to the sight-seeing public. And then comes the outcry that the responsibility for such failure comes from within the walls of the Royal Academy, and not from without.

A little consideration of the whole subject by any unprejudiced architect may assist in the solution of a problem which has already entered the controversial stage. On the one side we have the Council of the Academy, the recognised authority on national art, prepared with open hands to receive for exhibition any meritorious work by painter, sculptor, or architect. With the first two there can be no difficulty, for their work, either with brush or chisel, is unmistakable evidence of individual skill. But with the architect the case is totally different. The work submitted by him for exhibition is neither more nor less than a representation, either pictorial or geometric, of a building or parts of a structure of some kind or other, and, consequently, must be judged from another standpoint. Such exhibits are not necessarily the work of architects, but are, in most cases, the handiwork of professional draughtsmen specially trained to make pretty pictures to catch the public eye. There was a time when architectural drawing was rightly regarded as a technical art, and T-square, rule, and compasses were the principal implements employed by an architect to convey his ideas to paper. Drawings of this character will be found to prevail in works on architecture of the eighteenth century, and elaborate specimens, prepared by architects of high repute in the earlier half of the nineteenth century, may still be studied in portfolios in architectural libraries. But the most noticeable examples of pure architectural drawing may be seen in the Burlington Devonshire collection, where the handiwork of Palladio, Inigo Jones, and other masters of art may be studied side by side. These productions are, in many

cases, supplemented by sketches of modelled and decorative work, sufficient to convey the architect's ideas of scale, proportion, and fitness in the composition and adornment of his building. But this method of drawing, which achieved such admirable results, would be regarded with something akin to contempt by the pictorial draughtsmen of our own time, and is not likely to find favour in an age which encourages sham perspectives, false accessories, and impossible skies.

Some few years ago I was inspecting the architectural drawings at the Royal Academy Exhibition, when the tomb-like silence of that restful chamber, known as the Architectural Room, was broken by female utterance, "Oh, what a pretty building!" I turned round and found only two other occupants, a man and a woman. Waiting an opportunity, I examined the drawing which had stirred female emotion. Yes! It might fairly be called a pretty building, with its stately white façade, whether of brick or stone, terra-cotta or marble, it was impossible to say. Shadows were there, such as can only be seen under a tropical sun, nameless birds hovered in the cloudless sky, and a carriage and pair was dashing up the spacious causeway. In a shadowy corner was the inevitable policeman, and near him was a small bareheaded boy, gazing with wonder at the monumental edifice. How I pitied that poor boy in the blazing sunshine! Then, taking note of the town that was to be adorned with this "pretty building," I resolved to pay a visit there when an opportunity offered. And what did I see? A long façade of dark red brick with a northern aspect, in a narrow, ill-paved street that would have been fatal to the springs of a well-appointed carriage. And for want of better material to cover the wall space of one poor little gallery, the Council of the Royal Academy are compelled, as a matter of necessity, to admit similar productions, commonly called architectural drawings. Can you blame them?

To suppose that the public are likely to be attracted by pictorial representations of buildings, or, in my opinion, by architectural drawings of any kind may be dismissed as hopeless. They see in the galleries devoted to painting and sculpture the creations themselves of the sculptor and painter face to face. In the Architectural Room they do not see the architect's creations, but only pictorial attempts of various degrees of merit, all necessarily ineffectual to represent them. So much of the pictorial art as finds place in an architectural drawing is an endeavour to represent, with more or less effect, the dimensions of a

building, its symmetry, proportions, grace of line and traits of invention. But an architectural drawing entirely fails to make felt the structure's weight and mass, or to exhibit any skilled combination of the forces of down pressure, thrust, and resistance which it embodies. The nobility of aspect, never absent from an ancient masterpiece of architecture, is a testimony to its having been conceived as an embodiment of these, quite as much as a presentment of grace, symmetry, and proportion of line and surface. And in the realised combination of all its factors lies such a structure's supreme charm. In the Architectural Room no indication is possible that, in the conception of any design, one ounce of ponderable matter has been consciously dealt with. If, therefore, a work of architecture can only be fully judged in realised combination of all its factors, and if none but a skilled architect can form an approximate forecast of their realised expression, it is surely desirable to impress upon the general public their absolute and hopeless incapacity to pass judgment upon architectural designs.

It is a matter of regret that there are no present indications of a return to the old order of honest architectural drawing, and that, in spite of continued ill-success, the prevailing custom of representing buildings by little pictures, admirably adapted for books and serial publications, should be encouraged. Perhaps the day may come when geometric drawings to a large scale in line and colour, and perspective sketches to a very small scale (sufficient to indicate the general appearance of a building), may find favour with the architect. And if the Council of the Royal Academy were to make known their sympathies with him by an intimation that pictorial drawings were to be of limited size, and that geometric drawings and details of ornament and decorative features would be judged on the score of architectural merit rather than as displays of draughtsmanship, a step would be taken, in my opinion, in the right direction.

It is not essential, nor is it desirable, that such drawings should be of that elaborate character which is the marked characteristic of the handiwork of successful students in the *École des Beaux Arts*. Nothing can be more beautiful, as examples of architectural drawing, than the meritorious studies of the Pantheon by M. Chodanne, or the restoration of the Baths of Diocletian by M. Paulin. Few of our students, entering the arena of practical architecture, could find leisure, after the office day work, for such laborious undertakings; but, such is the skill displayed by many of them in competitive work submitted for our annual prizes and studentships, there is little

doubt they would hold their own in any international competition.

Our period and country give rich opportunities to the art of architecture. The growth of municipal life, the spread of education, and the munificence of citizens in bequeathing works of art to adorn the galleries of our great towns are among them. The Vestry Hall of a previous generation has given place to the Town Hall with its stately chambers and façade of palatial aspect. The village school has been superseded by educational buildings of almost monumental character, and galleries embellished with painting and sculpture are finding favour with a better-informed population. It is within the range of possibility that, contingent upon a short period of peace and prosperity, these newly-formed municipalities may be competing with each other in the near future in the erection of buildings sumptuous with marble and mosaic, and embellished with the best creations of both painter and sculptor. Nothing could tend more to further such a desirable result, for the national benefit, than an exhibition at Burlington House of drawings, sketches, and models, by the architect, the painter, and the sculptor, embracing the chief constructive and decorative features of one or more notable buildings in course of progress. Such exhibits placed together in the same gallery would bear testimony to the brotherhood of art.

2. BY D. S. MacCOLL.

THE discussion on the architectural exhibition at the Academy has run its course through several numbers of the *ARCHITECTURAL REVIEW*.^{*} I am to attempt a summing up, and to add anything that occurs to an observer interested but not implicated in the matter.

Mr. Ricardo's article, from which the discussion started, contained a criticism and a definite proposal. The criticism was, in brief, that (1) the space allotted to architecture in the summer exhibitions is too small to allow of proper illustration; (2) that proper illustration would consist of working drawings, including plans, sections, and details to $\frac{1}{2}$ inch scale, models also, and photographs of completed work, at the discretion of the exhibitor; (3) that proper illustration does not include the pictorial perspectives furnished by professional draughtsmen: that these form the bulk of the present exhibitions; that they are there in the vain hope of attracting popular interest to architecture by mimicry of the adjoining pictorial

^{*} October, 1902, by Messrs. Ricardo, Norman Shaw, Belcher, and R. Blomfield; November, by Mr. Ernest Newton; December, by Messrs. Basil Champneys and Beresford Pite; January, 1903, by Prof. Simpson.

exhibition, and that they are there in this abundance by direct encouragement in the tradition of selection and hanging. Perspectives, he urged, should be small-scale explanatory sketches by the architect to give a general idea of grouping.

Mr. Ricardo's proposal was that the summer exhibition should be abandoned to the present tradition, making itself as popular as it may, and that a supplementary exhibition should be held in the winter months, when the Academy is already open for the Old Masters. Ample space might then be found for an exhibition such as veritable students could approve, and architects who at present abstain might feel disposed to take part.

Mr. Ricardo's criticism brought out a very interesting statement of the Academical view from Mr. Norman Shaw and Mr. Belcher, to be considered in a moment; but first there is a more radical reply to be disposed of. In the view of Mr. Blomfield and Mr. Champneys not only the Academy exhibition, but any exhibition of architecture by drawings is futile. Of this view it may be said that it will commend itself rather to the men whose ideas and methods, and also their position as architects, are settled, than to the younger and less reputed. An exhibition has two possible virtues: advertisement for the exhibitor, and instruction to be gained from other exhibitors. The man who has won his place may have got beyond the need, or at least the desire, of the second, and he may be chary of giving up his designs to the inevitable cribbing that follows successful work; but the beginner is more fluid in his ideas, more eager to learn from contemporaries, and he may be glad to show, not to the public, but to the fellow artists who in the first instance give him his reputation, of what he is capable.

Granted, then, that there is to be an exhibition, we now have it, under the hand of two academicians, that within the Academy as without, the present exhibition is condemned. Both are at one with Mr. Ricardo in disapproving the pictorial perspective. If ever that has been the darling of the hanger's tradition, it is now, we may take it, to be black-listed. Mr. Norman Shaw's picture of things from within is not that of complacent hangers displaying, from embarrassing profusion, models of what ought, in their view, to be displayed. They are revealed as making the best of a poor business. The small room is too big really. There is not enough of good work to go round its walls. And the academic appeal to architects is to rally, to send no more of those pictorial perspectives, to revert to severe professional methods of drawing, and to send in those ample working drawings that they have fondly supposed there was no space for. Here, then, is

one misunderstanding and delusion very usefully cleared away.

Mr. Ricardo's black picture, rearranged in this fresh light, shows as follows:—There is no need for a winter exhibition, because at present there is more than room for all drawings of the right sort sent in; all that is wanted is more of the right sort, and none of the right sort are overlooked. (Mr. Pite, it should be noted, is sceptical on this head.) We may take it, however, that the Academy is not, at present, prepared to admit photographs. Mr. Shaw throws his weight rather into the scale of highly-finished drawings, such as are made by French *Prix de Rome* students. It is urged, in reply, not unreasonably, that to demand this standard of drawing from working architects would mean bringing in the outside professional draughtsman, whom we have just dismissed, in a new rôle, and confusing the issue afresh between the merits of the thing represented, the building, and the charms of technique in its representation. Mr. Champneys and Mr. Pite are all for the actual working drawings, with no titivation for exhibition purposes, and Mr. Pite urges that framing and glazing should not be enforced. The idea is that architects should address one another in the current language of the workshop, by the indications that are perfectly intelligible to themselves, and with the least disturbance of their actual work for purposes of parade. Mr. Simpson points to a provincial exhibition, successfully arranged in accordance with Mr. Ricardo's ideas, and demands greater facilities for the visits of students.

Such being, in sum, the agreement and divergence of the views expressed, I will add the observations that occur to me on the subject.

I. THE EXHIBITION AND THE PUBLIC.—Architects will surely be wise if they make up their minds to it that the public who will take the trouble to understand architectural drawings of any kind, or who, having taken the trouble, will be competent to appreciate, must always be a small one. Mr. Belcher's idea that "in time the public would also come to appreciate how much is due to right proportions and to proper relations and scale of each part to the whole building . . ." is, I fear, an amiable dream. The number of people who appreciate all this will continue to be a meagre company outside of the profession, and what is more, very limited inside of it. To think it unnatural that only two visitors enter the architectural room for every two thousand in the painting rooms is to misconceive the situation. If there were only good pictures in the painting rooms these would be as empty as are those of the National Gallery. In the matter of painting the Academy has definitely capitulated to public taste.

It has no teaching, no convictions, holds up no standard; it is not an academy at all, but a universal provider. If this were profitably possible in the case of architecture, the same thing would have happened. But drawings, even of the worst kind of architecture, have so feeble an attracting power on popular taste that the efforts of the most pictorial perspective-maker have not compromised the architectural room beyond redemption. To suppose that people will be tickled by a pictorial perspective after a debauch of pictures, is like expecting a child to be corruptible by bread thinly buttered after unlimited cream tarts. By the nature of things, then, rather than by their own virtue, the architects alone in the Academy have still a respectable position that defies their efforts to lose it. If no pictures were in the adjoining rooms it is conceivable that by this time the architects of the popular art journals, the designers of art-nooks and all the rest of it, might have made a popular show of architecture in the Academy; as it is, they have not a chance: the bad picture is too much for bad architecture.

The architects, then, may thankfully resign themselves to seeing, in their Academy exhibition, instead of a bait for the obstinately shy public, a possible influence on students of their art, a place where a sense of honour and shame might be kept acute, and a premium put upon the right ambitions. The smaller the room the more intense may be the effect produced. The managers of the exhibition ought to go beyond selection, and actively invite the thorough representation of notable work. Better four good buildings on the four walls than a job lot of four hundred. And let them be assured that the more they aim at doing the best thing for their students, the more they will interest and influence the perceiving part of the public. Severity will not alienate them; paltering does. The difficulty of understanding the conventions of architectural drawings has been very much exaggerated. To an intelligent man there is nothing inscrutable in an elevation, a plan, or a section. Every man who wishes to find his way makes use of a map. It is only in a few matters, like staircases, that the architect's drawings call for a small exercise of spatial imagination. The mystery in architectural drawings is not what the lines stand for, is not the construction, for that may be learned, is not the planning, whose convenience may be appreciated; it is beauty of design that is the mystery. The man who has the clue to this will find architectural drawings neither dull nor difficult; to the man who has not they can only be a bore.

2. PERSPECTIVES.—It is not, then, for the perceiving part of the public that the pictorial additions to perspectives are required; they are

sauce for the artless client, and in decency should be shown to him only *in camera*. But the reaction against these dressings of perspectives might, it seems to me, do injustice to the uses of the perspective itself. The fictitious perspective is mischievous, but in many cases a diagram is really called for to realise the effect of the building, given the actual spaces round it. If these are not taken into account, the perspective is fictitious. But suppose the width of existing streets or spaces taken into account, and that the building has a feature like a dome, set back from the street elevation. In the conventional elevation, which supposes the eye to be at the level successively of each part drawn, the dome projects above the roof-line by the whole of its actual height. I defy most draughtsmen to guess accurately at the true effect from the other side of the street by an inspection of plan and elevation only. A diagram would have to be constructed by the designer for his own purposes, and this would be a proper part of his exhibition apparatus. Conventional perspectives, moreover, of the bird's-eye sort, are very useful in giving a general idea of dispersed groups of buildings; not of their aspect, but of their constitution as plan and elevation. Familiar instances are Loggan's views of colleges, which are not reliable in detail, but enable one to grasp easily the setting out of these buildings. The policemen and hansom cabs should be reduced to their true function, which is to give a useful reference for scale. To serve this purpose *their* scale must not be fictitious.

3. MODELS.—Some years ago models were urged upon architects as more nearly approaching the real thing than drawings. Mr. Blomfield has enumerated various drawbacks: I may point out another in their ordinary use. We see them as toy-like objects from above. To get anything like the real aspect they should be supplemented with a screen, pierced with eyeholes at a height corresponding to the height of a spectator's eye on the scale of the model. Otherwise they only serve the purpose of the bird's-eye views referred to above.

4. PHOTOGRAPHS.—Mr. Newton is surely right in his contention that photographs are the most satisfactory common term for comparing completed buildings, and the least misleading means of judging what any single building looks like. A picture of a building is one thing, viz., a pattern selected out of the lines, surface, and shadows of a building, with some humouring for the picture's sake; and we all pictorialise a building that pleases us at all as we look at it. But the uncompromising account of the facts is another thing, and it is the thing we want for judgment, without the picturesque draughtsman's bias per-

verting it. From most of the picturesque draughtsman's efforts, it may be added, one can learn precious little about the architecture, especially when he employs a manner proper to thumb-nail sketches on a drawing several feet in extent.

Photographs, then, would seem to be the proper supplement of the architect draughtsman's work in an exhibition. There is one point, however, that has been a little lost sight of throughout the discussion. The summer exhibition at the Academy is only one moment of an exhibition that is going on all the year round. This exhibition takes place in the pages of architectural periodicals like our own REVIEW. Now a photograph, unless of large size, is, like a small drawing, a tiresome thing to look at on a wall: it is much more comfortably visible on the printed page, adjustable in the hand. This fact seems to indicate the reviews as a natural exhibition place for photographs and small drawings, while the Academy is the necessary place for those larger working drawings that cannot be printed on a page without inconvenient reduction. The fact, I may add, that so wide an all-the-year-round exhibition is open to architects, makes the duty of the Academy to enforce a high standard the more easy, because there need be less fear of injustice by exclusion and a large review of material is ready to hand. Our policy, it may not be out of place to say here, in this REVIEW, is to present, liberally, material that has one claim or another to be considered in such a sifting. We present it, as in an exhibition, without comment, reserving that for the really outstanding cases.

5. THE WINTER EXHIBITION.—May I return, last of all, to Mr. Ricardo's suggestion, for the

purpose of pointing out that, oddly enough, for the first time, I suppose, in the history of its winter exhibition, the Academy this year has given a room to architecture. The architecture, it is true, is that of one Old Master, Dædalus to wit. But in this fact, I think, we may see an opening for an exhibition that would meet Mr. Shaw's desire for scholarly drawing of monuments, and also Mr. Ricardo's for ample illustration of interesting modern work. The difficulty with an aged body like the Academy is to establish a new precedent; the difficulty, for it, is to annul the precedent once established. Here is the precedent dropping from the sky (or coming up from the shades). Let the architects claim it for established that they now have proprietary rights in the gallery to the right of the entrance at winter exhibitions; that there is to be an architectural "Old Masters." Such an exhibition might include studies of old work such as Mr. Schultz did in Greece and Constantinople. But it might also include the drawings of deceased Masters up to the most recent, as is the case on the painting side. The precedent, it may be remarked, has set out with a fine carelessness of established rules: there are photographs in it, and casts and models, as well as drawings.

The upshot of our discussion then is, that we may look for a new departure at the summer exhibition of the Academy, if architects will respond to Mr. Shaw's challenge and send in workmanlike drawings; and that if architects know how to deal with Fortune when she is off guard, they have their Old Masters' exhibition secured. If these two changes should spring from the friendly interchange of views here the discussion will not have been in vain.

Notes.

THE discussion on architectural drawing and its exhibition is brought to a conclusion in the present number, with the result, we may hope, of some clearing up of ideas on that subject. It will be immediately followed by the discussion of a more fundamental question, that of architectural education. This will be dealt with in the following way:—Before inviting an interchange of views and projects, we shall publish a series of statements, as full and exact as possible, of the existing systems of education, not only in the various British centres, but also in France, Germany, and America. This comparative survey will furnish a ground-work for criticism, and we invite the close attention of theorists to this "Blue Book" work when they come to express their view of

what is the desirable system for England. Things are in a highly fluid state at present between the old prentice-system and the various tentatives at regular teaching; and a great deal will depend on the lead given to thought in the next year or two before it stiffens into organisation.

We hope in a later number to give some illustration of the remarkable discoveries at Knossos in Crete, due to the energy of Mr. Arthur Evans. In the meantime we may advise all architects to visit the display of photographs, drawings, and casts illustrative of these discoveries to be seen at Burlington House, in an exhibition that ranges from Dædalus to Mr. John Brett.

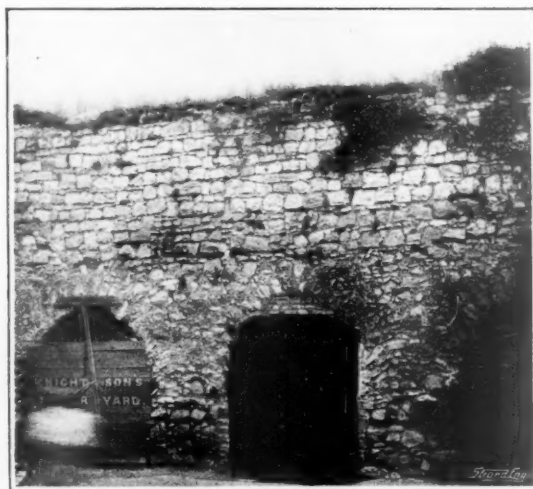
Mediaeval Southampton.

OF the endless stream of travellers who pass through Southampton on their way to distant lands, probably not one in a thousand ever thinks of the town as anything more than an important modern seaport whose prominence is practically coincident with the South African War. But Southampton has seen other periods of prosperity besides the present, and can still exhibit to the sightseer relics of her greatness which date back at least to the time of William the Conqueror. It is not certain whether the spot was fortified in Saxon times; but if it was, the defences were evidently unavailing, for the Danes landed here in 873 and plundered the inhabitants. They landed again in 980, and again a few years later, which incidentally proves that the town was of some importance to have commanded such attention from enemies. Later on Southampton had to protect herself almost constantly against the French, and in 1338 suffered terrible disaster at their hands when they landed from fifty galleys and sacked the whole town, being only driven off with the assistance of the country round after the damage had been done. But it was not only as a town which enemies might destroy at their leisure that Southampton excelled, though singularly enough nearly all its historical associations are connected with war, either aggressive or defensive. It was here that Edward III. and the Black Prince embarked with their army for the campaign which ended at Crecy, and, at a later date, Henry V. mustered his army here and sailed away to fight at Agincourt, while the town supplied its quota to assist in checking the Spanish Armada.

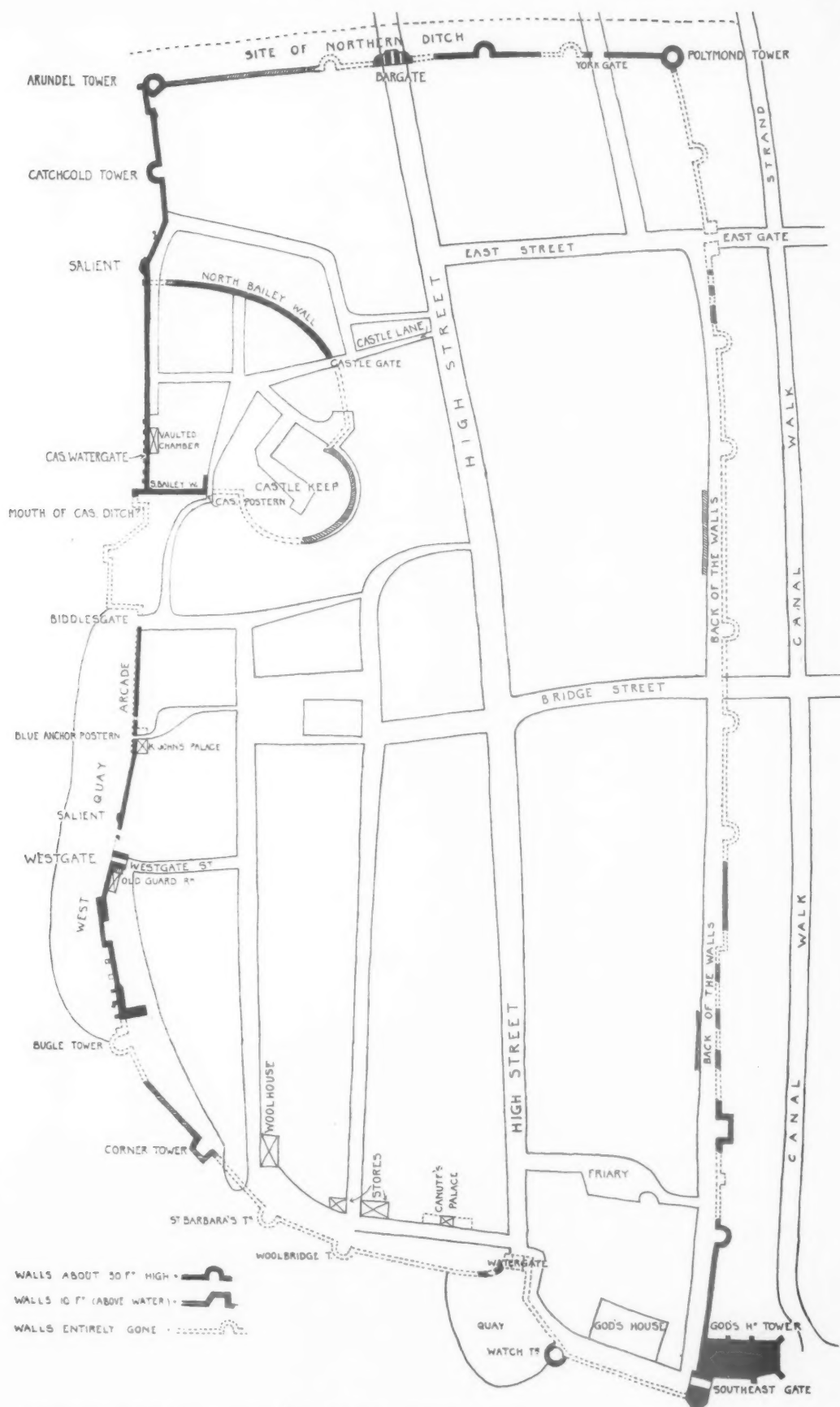
There have been two periods of activity in building the walls, the first in Norman days following the incursions of the Danes, and the second in the fourteenth century as a reply to the sack of the town by the French; but while there are many portions which are entirely Decorated in style, there is little of the Norman work remaining which has not been altered at the later period. The town, that is to say the old town which was enclosed within the walls—for what is now Southampton Docks was, until 1838, merely two hundred acres of slime and mud—stands at the southern end of a narrow spit of land abutting upon Southampton Water, and bounded on the east and west by the rivers Itchen and Test, so that it was eminently adapted to become a strong fortress. The base of the walls on the west and south was washed by the tide, and a broad ditch protected the other two sides. This ditch has long since disappeared, but its name survives, for

the narrow alley now standing upon its site is still familiarly called "The Ditches."

The circuit of the walls comprised seven gates, five chief towers, and nineteen or twenty smaller ones, the number of the latter being differently given by various authorities, the discrepancy probably arising through a misconception as to what was a tower and what was merely a large flat buttress. In addition to these defences, the western curtain was strengthened and dominated by the Castle, which stood on a high artificial mound, but has entirely disappeared, except the bailey wall which ran inward in a double curve from the town wall and joined it again further south near the vanished Bridlegate. The Castle consisted of a keep standing in the midst of a small enclosure to which there were two gates, the chief of which, Castle Gate, stood in what is still called Castle Lane, where a fragment of the masonry still juts out into the roadway marking the exact site. The Castle Postern has entirely disappeared. Castle Watergate may be dismissed for the present, as it is included in the circuit of the walls. History does not tell us much about the Castle itself, but from the records of the various Constables we gather incidentally that it was not an unmixed blessing to live in a walled seaport town; for in 1206, Robert de Cantaloupe was instructed to seize ships for the King, and owners who hesitated in parting with their vessels were to be treated as enemies; and in 1339, Sir Richard Talbot was commanded to see that the town defences were kept up at the expense of the inhabitants (this was the year after the great sack by the French). By 1376 the burgesses felt



NORTH BAILEY WALL.





NORTH-WEST ANGLE WITH ARUNDEL AND CATCHCOLD TOWERS.

themselves so burdened with the incessant murages that they petitioned the King to accept the town at their hands and relieve them of the expense of keeping the walls in repair. The Castle was early allowed to fall into decay, and by 1550 it had become customary to shoot rubbish on the Castle Green. In 1618, what remained was granted away to the Gollop family, who speedily cleared the site by permitting the stone to be removed for the repair of the walls.

The most convenient point for commencing a survey of the walls is the north-west angle, where the northern ditch emptied into Southampton Water. Along the western side of the town, where the walls still stand nearly 30 ft. high as far as the south bailey of the Castle, there are two towers which claim notice. The first is Arundel Tower, the summit of which stands about 60 ft. high above the former water level, or about 55 ft. above the Western Shore Road, which was made within the last fifty years and skirts the whole of this side. The tower is now a mere shell of Decorated masonry, with indications of the rampart walk and a flight of steps leading from the north town wall to the summit. The second tower, 130 ft. away, is called "Wind Whistle," or "Catchcold" Tower, and is seemingly of Perpendicular date, as it is evident from the masonry on either side that it is an insertion in the Decorated curtain. Further south the

wall breaks forward to an obtuse angle which is dominated by a salient carried out to a diagonal buttress on flat arches and also Decorated in structure. This fourteenth century masonry ceases a few feet further to the south at the spot where the north bailey of the castle swept round to the town wall and terminated in a broad buttress built upon the sea-front of the wall to take the thrust. Here the stonework changes



INTERIOR OF ARUNDEL TOWER.



CASTLE WATERGATE.

from large and small stones used indiscriminately to small ones of uniform size and roughly squared, and as it is exactly similar to the Norman work in King John's Palace it may, without fear of contradiction, be attributed to the same period. This continues to the south bailey, a distance of about 120 yards in an unbroken line, save for seven buttresses towards the end, which seem to have been added at various times as the tide weakened the foot of the wall and rendered repairs necessary. Between the fourth and fifth of these stands the Castle Water Gate, and to the left of this is a vaulted chamber 55 ft. 3 in. by 19 ft. 6 in. by 25 ft. high. It is roofed with a barrel vault upon strong transverse arches. There is no access to it from above—it may have been entered from the Water Gate—and the floor level is above the present roadway and consequently 6 ft. above the water-line. It has one narrow-pointed window and a small doorway opening to the sea. The Water Gate is a mere fragment of its former self and has three steps remaining of a flight which led to the small Castle Quay, a landing stage to which the door of the vaulted chamber probably also gave access. From this gate to the south bailey there seem to have been other vaulted chambers, as there are indications of loops and windows in two storeys.

South of the bailey the wall crossed the castle moat—if there was one as Davies' "History of Southampton" suggests, but its use is not evident—and projected south-west in a large bastion which protected this moat, Biddlesgate and the West Quay, though not a vestige of these features remains. Bridlegate or Biddlesgate seems to have been merely an arch in the wall protected by machicolations, but was of great importance

as it formed one of the chief approaches to the then shipping centre.

At this point the West Quay, now incorporated in the Western Shore Road, commenced and extended about 230 yards as far as Bugle Tower. Half the Kings of England landed and embarked here during their periodical excursions into the region of their real or imaginary French possessions, and among other travellers a large number of the Pilgrim Fathers sailed from this once narrow strip of gravel to help in founding the mighty nations which have arisen in North America.

Resuming the circuit from Biddlesgate there are two other gates which led to the Quay, Blue Anchor Postern and Westgate, both of which are still in existence. Here also begins the Decorated arcading with which the Norman walls were strengthened, together with three towers which were pulled down in 1775. The walling is 30 ft. high, the Norman portion 4 ft. thick, and the Decorated addition 3 ft. thick, making a total thickness of 7 ft. The supporting piers of the arches are built into the older work as high as the springing, but above that the outer wall is 16 in. thick, and stands 20 in. clear of the Norman wall behind, forming a continuous machicolation hidden in the thickness of the wall. The Arcade has been built without regard to the openings in the rearwork, and would almost seem to have been contrived to block the windows. This is particularly the case with the building called King John's Palace, which occupies the two bays south of Blue Anchor Postern. The town documents make frequent mention of the "King's Houses," and this edifice and another which stood on the north side of the Postern—Blue Anchor



THE ARCADING, WITH KING JOHN'S PALACE AND THE BLUE ANCHOR POSTERN.



WESTGATE FROM THE QUAY.

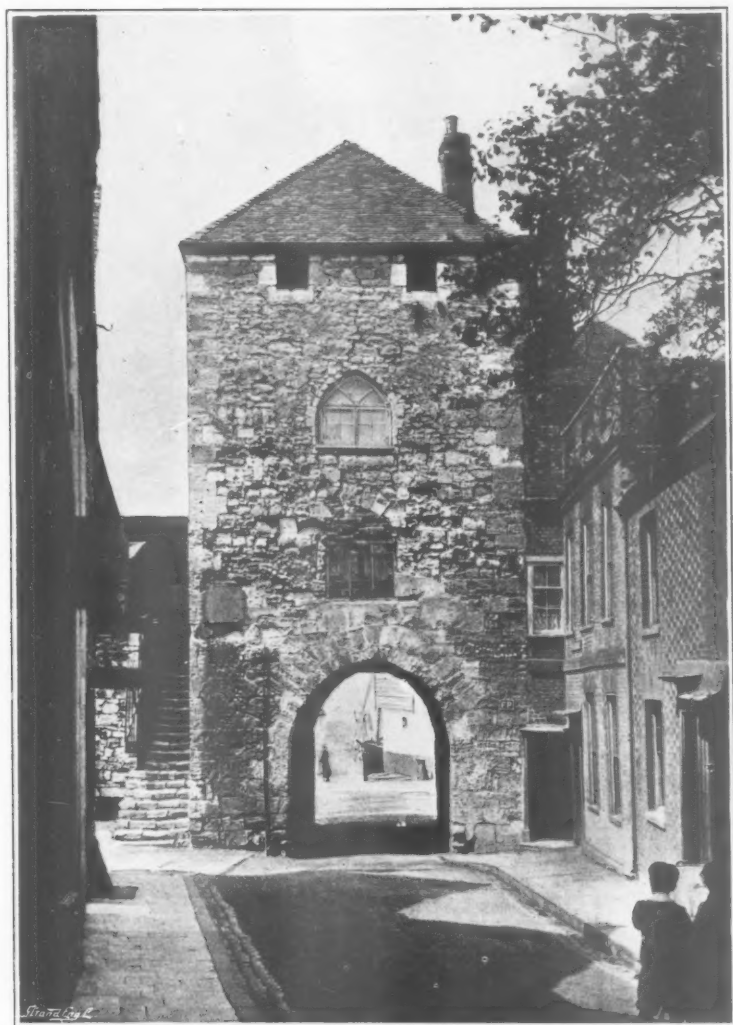
Lane being merely an alley between them, and the Postern a plain pointed arch with a portcullis—are commonly held to be the houses referred to, but the Rev. S. Davies, to whose "*History of Southampton*" the present writer is indebted for much of his information, combats the idea, saying that their small size is against the suggestion, and that the Castle was not a hundred yards away, where the King would certainly secure far better accommodation. Be this as it may, King John's Palace shares with the Jews' house at Lincoln the distinction of being the chief relic of Norman domestic work in England. It is simple in the extreme, and measures about 40 ft. square. Internally it had two floors, the upper being chief, with a fine shafted fireplace on the north wall and the chimney carried up in an external projection upon four plain corbels. There is also on this floor an intramural passage, which leads from the east wall along the south till it ends in the town wall upon the west. The house had a doorway to the beach, and therefore does not seem to have been intended seriously as part of the defences, but in the fourteenth century the arch was blocked up and only an oilet left. The windows are all two-light round-arched, with simple mouldings and a shaft with a cushion capital between the openings.

There are no more features of interest except a

salient—in the middle of which the masonry changes from Norman to Decorated—similar to the one already described, between this point and the Westgate. This Westgate is a structure of Decorated date, and one of the most picturesque spots in Southampton. It is three storeys in height, and was formerly square topped with two embrasures on each side for artillery, but the



THE OLD GUARD ROOM.



THE WESTGATE.

embrasures are converted into windows now, and a tile roof adds just the requisite amount of colour to render it a perfect "bit" for artists. It was defended by portcullises worked from above, and, in addition, there are rows of holes in the vaulted archway for the purpose of pouring boiling water or lead on an enemy. Beside the gate is a flight of steps leading to the "alure," and separating the gate from the old Guard Room, also a Decorated structure, built of wood on a stone base, and erected against the town wall, but still preserving the alure, although the part covered by the Guard Room is incorporated in the building. The town guard mustered here in times of danger, received their orders, and marched out along the ramparts to their allotted posts. South of the Westgate the work is Decorated, clearly marked in most places, but at intervals degenerating into a slovenly rubble as if built in a hurry, possibly

when the French, in 1404, were ravaging the Isle of Wight and were expected at Southampton. Behind a portion of this wall are the remains of another vaulted chamber. There are the remains, too, of an arcade similar to the one described, but consisting of six arches, of which only two are complete. The sixth of these probably abutted against Bugle Tower, which has disappeared, but is known to have stood somewhere near this spot. From here onwards as far as God's House Tower, at the south-east of the town, there is little enough to show that fortifications ever existed along this front, for in addition to Bugle Tower, St. Barbara's and Woolbridge Towers have disappeared, as well as the town Watergate and nearly the whole curtain wall. The West Quay ceased at Bugle Tower, and from here to the Watergate Quay the tide washed the foot of the walls, leaving at low water a narrow strip of shingle called the "Gravel."



THE SPANISH PRISON.

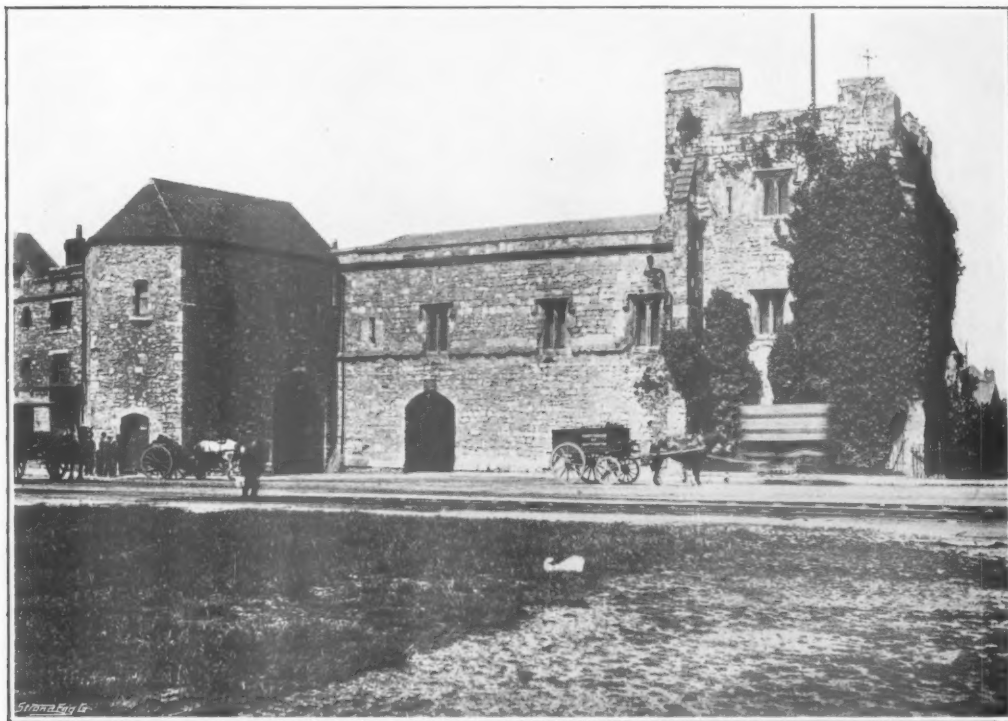
Between Bugle and Corner Towers the walls remain to a height of about 10 ft., and appear to have been patched up incessantly, and now have little interest. The foundations of the Corner Tower are still visible. The southern defences were destroyed by Act of Parliament, 1803-4, to allow of harbour improvements. Behind these vanished works were, and still remain, the granaries and stores, chief among which is the Woolhouse, a rectangular structure of fourteenth-century date, with quaint semi-cylindrical buttresses. It is more familiarly known as the "Spanish Prison," and is thus a link with the Peninsular War. The foundations of the other stores have been used as a superstructure for their modern successors, but the Decorated masonry and buttresses may be still seen 20 ft. high in places. In this same line behind the wall is also the fragmentary portion of a building which was evidently another Norman house but of considerable extent, and it has in consequence been called "Canute's Palace," for no other reason apparently beyond its size. It was over 100 ft. long by 16 ft. wide, two storeys in height, and consisted of two long galleries superimposed. Probably it was divided into apartments by wooden screens. It has no features of interest, as the original openings are greatly disguised, and even the alterations which were made in the Decorated style have almost entirely gone. Old drawings of this portion of the walls show a high semi-circular tower of three

storeys with a sloping base, called Canute's Tower, which, as no existing plan gives this name to any portion of the defences, is probably to be identified with Woolbridge Tower. The drawings show a breach close beside the tower, and as a breach is known to have been made near the Watergate about 1780 this surmise is probably correct.

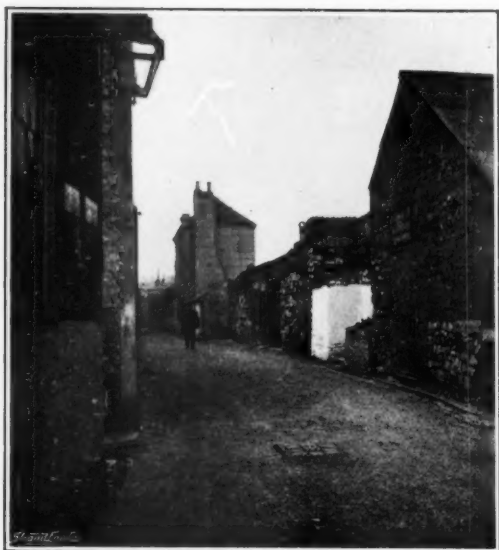
The Watergate, or Flood Gate as it was occasionally called, was an erection dating back to Richard II., and afforded the only approach to the Town Quay: and this is the chief cause of its destruction and the disappearance of the adjoining curtain. Something still remains of the curtain in a house west of the gate, where there are four machicolations in cement, and the house next to where the gate stood still follows the curve of the old wall, but is also masked in cement. An undated engraving of this portion, apparently about a hundred years old, shows these same features in stone, so that it is probable that the removal of the stucco would reveal the original town wall. The arch of the Watergate soon proved utterly inadequate for the traffic, and a postern was then cut on the western side, which was also insufficient. Then a breach was made east of the gate, and after that anyone who desired to tranship goods to his premises merely made a breach of his own at the most convenient point. The eastern breach was made too close to the gate and shook the abutment, so that a part of the Watergate collapsed in 1800, and the whole was taken down



THE WATERGATE. FROM AN OLD PRINT.



GOD'S HOUSE TOWER.



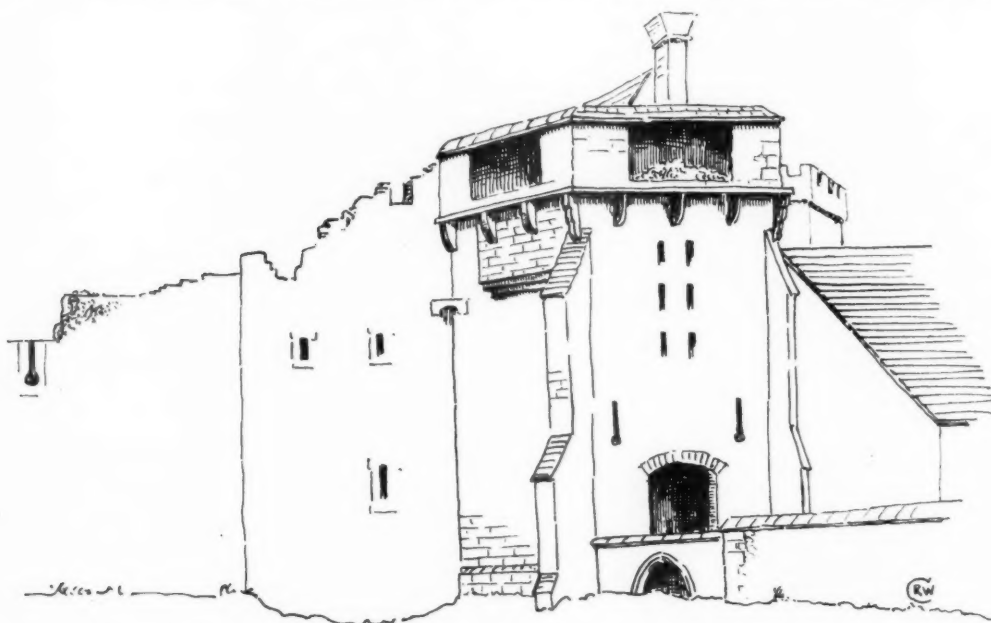
BACK OF THE WALLS.

four years later. The Watch Tower, which was similar to Woolbridge Tower, has disappeared, but its foundations exist in the base of a bay window of a public-house, and thus render it possible still to trace the walls across the south of the town.

God's House Tower, so called from its proximity to God's House or the Hospital of St. Julian—now the French Church—is of two periods, the left-hand portion in the illustration dating back to the thirteenth century and the rest being a century later. Both portions, except the tower proper, seem to have been carried up higher, and probably were adorned with battlements. The

addition of the later portion has thrown the gateway into a corner as it were, but this was done as a protection to the sluices of the ditch and seems to have been a necessary precaution owing to the frequent French attacks. In the fifteenth century this building was used as a store, and from 1707 till 1855 was the town gaol.

Turning northwards from this point, the wall continued in a long, sinuous line for a distance of nearly a quarter of a mile to Polymond Tower, at the north-east angle, with only one gateway—Eastgate—and six or seven semicircular turrets, all of which have practically disappeared, not apparently by deliberate licensed-by-Act-of-Parliament vandalism, as was the case on the south side, but by the more insidious process of individual destructiveness. The southernmost of the semicircular towers is still standing, together with a few fragments of wall about breast-high and of Decorated masonry, with tumbledown cottages built into and up against them. These are all the actual remains, but the names of vanished defences still survive, and incontrovertibly fix the position of ditches and walls. Thus what was once the passage-way which gave access to the ramparts in times of stress is still called "Back-of-the-Walls," and, incidentally, it is still quite as noisome as it could ever have been, even in the "good old days." Cats, children, and dustbins abound in this locality, and one of the latter occupies the interior of the rectangular projection, shown on plan as coming next to the still remaining tower. Outside this wall was a moat, stated frequently to have been a double ditch, though old drawings and engravings only show a single one



EASTGATE, FROM AN ENGRAVING BY HOOPER, MADE IN 1784.



THE POLYMOND TOWER.

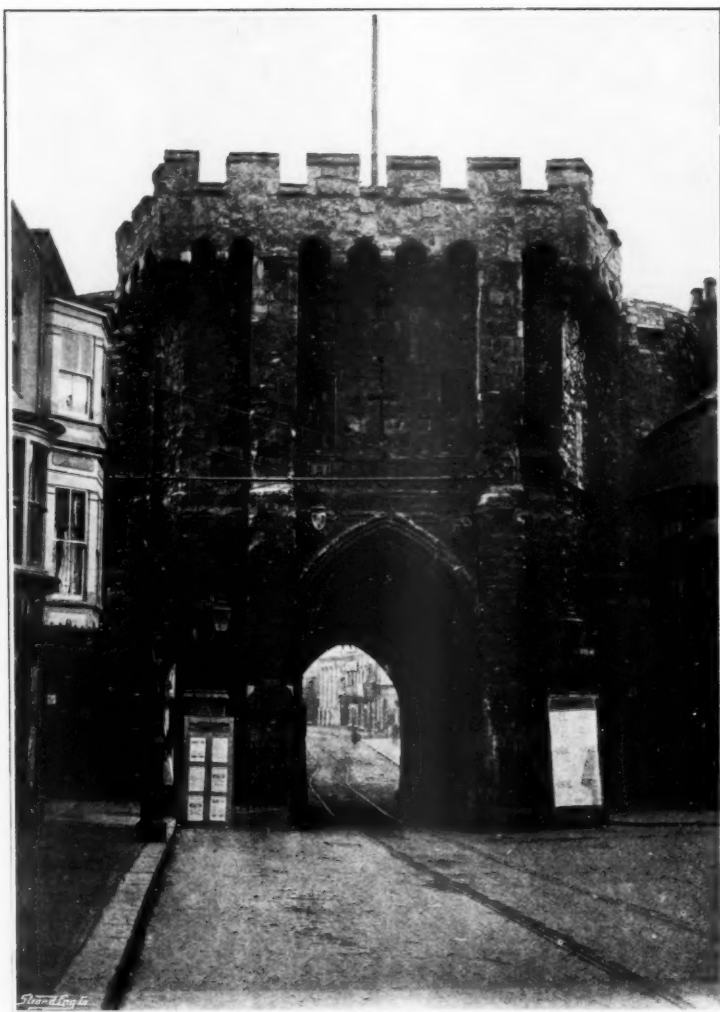
about 30 ft. wide. This spot has seen many changes since the ditch was first dug, for subsequently, about a hundred years ago, a canal was projected and actually excavated, though never opened. This has now been filled up and built over, leaving only a narrow alley (on the exact site of the counterscarp of the old moat) called officially "Canal Walk," but, as already mentioned, popularly known as "The Ditches," the two names taken together forming a very complete epitome of its history. Bridge Street is a comparatively modern road, and was not made until the defences became useless.

The Eastgate, now destroyed, consisted of a semi-octagon projecting between two round towers and wholly Decorated in style. It was well supplied with oillets, and seems to have been very strong with a battlemented summit arranged for artillery, which was thus able to sweep the whole ditch with its fire. It had a drawbridge until 1670, when it was removed, and a bridge built in its place of stone taken from the Castle. There appears to have been a chapel over the gate. This structure was entirely destroyed in 1775, probably so as not to obstruct the line of the canal.

The next fragment in existence is St. Denys or Polymond Tower, a building little known even to natives of the town, as it lies now hidden from

sight at the end of a brewer's yard and embosomed in trees and creepers. Its first name is probably connected with St. Denys Priory, the scanty remains of which lie about two miles up the River Itchen. The name of Polymond is attributable to John Polymond, who was nine times mayor of Southampton between 1365 and 1392, dates which are quite in agreement with the character of the tower.

The north wall of the town, 200 yards in extent, is the shortest of them all, with three semicircular towers, of which a fair amount remains still to be seen, and one gate, Bargate, at once the joy and sorrow of Southampton. Its gateway is so narrow that it effectually blocks all traffic year in and year out, and year in and year out schemes are drafted by which either the gate is removed or the roadway engineered round the side, as has been done at Warwick. To remove it would be little less than a deliberate sin, for it is one of the most picturesque of mediæval gateways in the kingdom. It consists mainly of three portions—the wide Norman arch in the centre, which was the original gateway, and flush with the line of the curtain; two semicircular towers of Early Decorated type, projecting into the ditch; and a semi-octagon (Richard II.) occupying the space between them and projecting still further outwards. It once



THE BARGATE.

had its drawbridge and portcullises, but these disappeared when this portion of the moat was filled up, about the beginning or middle of the sixteenth century. It has been altered many times, for Queen Elizabeth blocked up the centre and cross oillet with a coat-of-arms, and at one period of its history a vandalistic corporation placed sash windows in the position of the side oillets. The two posterns were cut about the year 1770. The two lions cast in lead once guarded the bridge giving approach to the gateway. The town side of Bargate is a restoration, and has a modern appearance, but the sun-dial is original. In a bellcote to the left is a watch-bell dated 1605, the only remaining one of several about the walls which sounded the time of day, and also on occasion the alarm. York Gate, to the east of Bargate, is a modern insertion. There is nothing to be seen of the walls from Bargate to Arundel Tower, and this

portion seems to have been masked by old timber buildings for at least two centuries.

Apart from the old walls, Southampton has not much of architectural interest. There are many churches, it is true, and at least three of them are of ancient foundation, but these have unfortunately been mutilated or re-built. St. Mary's, the mother church, which, for some reason unknown to the writer, lies half a mile outside the walls, was founded by Matilda, but pulled down in 1550 because the spire formed an inconveniently good landmark for French invaders. It now forms the core under the road metalling of Bargate Street and East Street. Another and smaller church was built a few years later, a third in 1711 (enlarged in 1833), and the present one commenced in 1878 from designs by Street. It is rather a curious coincidence that the spire of the present St. Mary's is not yet built, though it is on account of funds, and not of French invaders.



ARUNDEL TOWER BEFORE THE "OLD TOWER" INN WAS REBUILT.

Holy Rood Church was originally built in the middle of High Street (corner of Bridge Street), and in 1320 was removed to a less prominent position on the other side of the pavement. It was rebuilt fifty years ago, all except the tower, which, however, is quite as uninteresting as if it had suffered along with the rest of the edifice. It contains a very good brass lectern of the fourteenth century, representing an eagle on a globe, which in turn is supported on a tower standing on three lions. Even St. Michael's Church is but the shadow of its former self, for the whole interior arrangement has been ruthlessly altered. Originally it was Norman—and very early Norman, too, as is attested by the plain and massive tower crossing; but the nave arcade has given way to iron and stucco columns of a not very great many years ago. The external walls are original Norman masonry for the most part, with Early English windows inserted, and Perpendicular tracery again inserted in the earlier arches. There is also a very good sixteenth century monument to Sir R. Lyster in the north aisle, but space will not admit of an illustration; some old chained books and a very good carved Jacobean chest and cupboard in the vestry dated 1646. But the gem of St. Michael's is the font. This consists of a square block of black marble on a cylindrical base sculptured with rude carvings, and credited with being of fabulous antiquity. It seems probable that, together with the fonts at Winchester

Cathedral, East Meon, and a fourth in the north of England, the one at St. Michael's dates from about 1180, and is the work of Flemish artists, the shallowness of the carving being due not



ST. MICHAEL'S CHURCH.



FONT, ST. MICHAEL'S CHURCH.

so much to inability on the part of the worker as to the hardness of the material. The whole font is untouched except for the small angle shafts of the base, which replace the original ones.

Of monastic and semi-ecclesiastical institutions Southampton *has had* a large share; but for the

most part these buildings are no more, and even the actual location of some of them is in dispute. But those of which a vestige remains a few words may be added. St. Denys Priory (Augustines) was founded in 1124, and does not seem to have been famous for the good behaviour of its monks, for the records preserve a set of rules drawn up on account of the prevailing dissoluteness, which would hardly be considered necessary in the most depraved of modern communities. It was duly suppressed under Henry VIII., and the property passed through various hands and suffered various acts of vandalism until, in the beginning of last century, all that remained was pulled down, except a fragment of Early English walling pierced with a single lancet window and the relics of a doorway, which stands isolated and forgotten in a field by the river. A convent of Friars Minor (Franciscans) also existed within the walls, but the only trace of the fraternity now remaining is a fragment of a conduit head a mile from the old town dating back to about 1300.

The Hospital of St. Julian, or God's House, which gave its name to the south-east tower on the walls, has rather more to show of its former extent; but, although it was built in 1195, the



TUDOR HOUSE.

portions which remain—now the French Church and a gateway leading thereto under a tower—show a mixture of transitional Norman and Perpendicular details, and are of no particular interest.

One house of all that must have enriched such a thriving city alone stands to-day as evidence of former greatness—Tudor House, in St. Michael's

Square, a very fine and rich example of half-timbered construction. Nothing is known concerning it, but as Henry VIII. was a frequent visitor to the town, popular tradition has invented a legend that Anne Boleyn resided there, and it has a considerable romantic interest for those who can swallow myths which are not in any way supported by documentary evidence.

ROBERT W. CARDEN.

Forms of the Tuscan Arch.

IN the domestic and civic architecture of Italy during the twelfth and thirteenth centuries, we find arches of which our illustrations should enable the reader to typify for himself the most frequent and characteristic forms. They are constructed of massive masonry. The intrados is generally semicircular, though it becomes slightly pointed in some of the later examples. The extrados varies extremely, but its varieties may be reduced to one or other of three dominant types. In the first of these it is a portion of a circle struck from a higher centre than that of the intrados, so that a greater or less "horseshoeing" is perceptible at the base of the arch.^{*} In the second the extrados is composite and rises above the intrados in the graceful form of a Gothic arch. In the third this effect of height is greatly increased by a device borrowed from the first type, and the extrados becomes what would be called in Italian an *arco composto sorpassato*, where the forms of the Gothic and horseshoe arches are seen in combination.[†] We may be allowed to regret that this arch has not received more attention in modern architectural practice: it is undoubtedly a form capable of very noble use and development.

Taking the second of these types as the most frequent, normal, and characteristic, we are now concerned to note that closer examination shows it for something much more subtle and remarkable than it would seem at first sight. Here is no mere Gothic form given to the extrados of what is substantially and structurally a round-headed arch. The voussoirs which compose it are, at least in many cases, so cut that the twin forms of extrados and intrados in this doubly composite arch are the just and beautiful result of its inward structure. The principle of the semicircular intrados makes itself felt in the upper voussoirs whose joints lie along the radii of that

curve. But the lower voussoirs on each side answer to the extrados, as their joints radiate from two centres which lie near the opposite corners of the base. Thus this interesting arch is partially Gothic, not only by the form given to its extrados, but in the principle of its construction, and may be held for a composite form of a very deep and remarkable kind. As to its distribution that is wide enough. A stroll along the narrower and more ancient streets of almost any Tuscan town will bring the student face to face with unnumbered examples, and the same may be said of Umbria, where Perugia and Assisi are peculiarly rich in material for these studies. A remarkable, if not unique, variant may be cited from the Bigallo at Florence. Here the small door has in its head an arch whose extrados and intrados are both pointed, while, however, the joints of the voussoirs radiate from a single normal centre. This example then is essentially Romanesque, though its outward form has become completely Gothic. Of uncertain date,^{*} it should be particularly noted as furnishing the final link in the chain of these successive and varied forms of arch construction.

The best point of departure for the study of such arches will be found in certain church doors of Lucca and its neighbourhood. To mention no others, the façades of San Frediano and Sta Maria Forisportam in that city, and a remarkable door or window raised many feet from the ground in the north face of the campanile at Diecimo (valley of the Serchio)[†] show plainly the primitive way of building by which in early times their architects sought to gain a certain desired effect

* An example given may be seen in the village of Monsummano Alto, Tuscany, which has hardly been inhabited since the plague of 1348.

† The illustration of this form is taken from an ancient arch at No. 1, Por Santa Maria, Florence. It is a rare example of double-pointing in early times.

* This door is plainly part of an older building—perhaps of the famous Guardamorto—which has been saved and incorporated with the Bigallo.

† Similar door or window arches may be seen in the town of Lucca itself by those who have not time to travel further afield. They will be found in the south face of the Campanile of San Frediano; the east face of the Campanile of the Duomo, and a civil example, though but ill-preserved, may be traced on the north face of an ancient tower at the corner of the Piazza del Salvatore and the Via Caldera.



TYPICAL TUSCAN ARCH—POR. S. MARIA, FLORENCE.

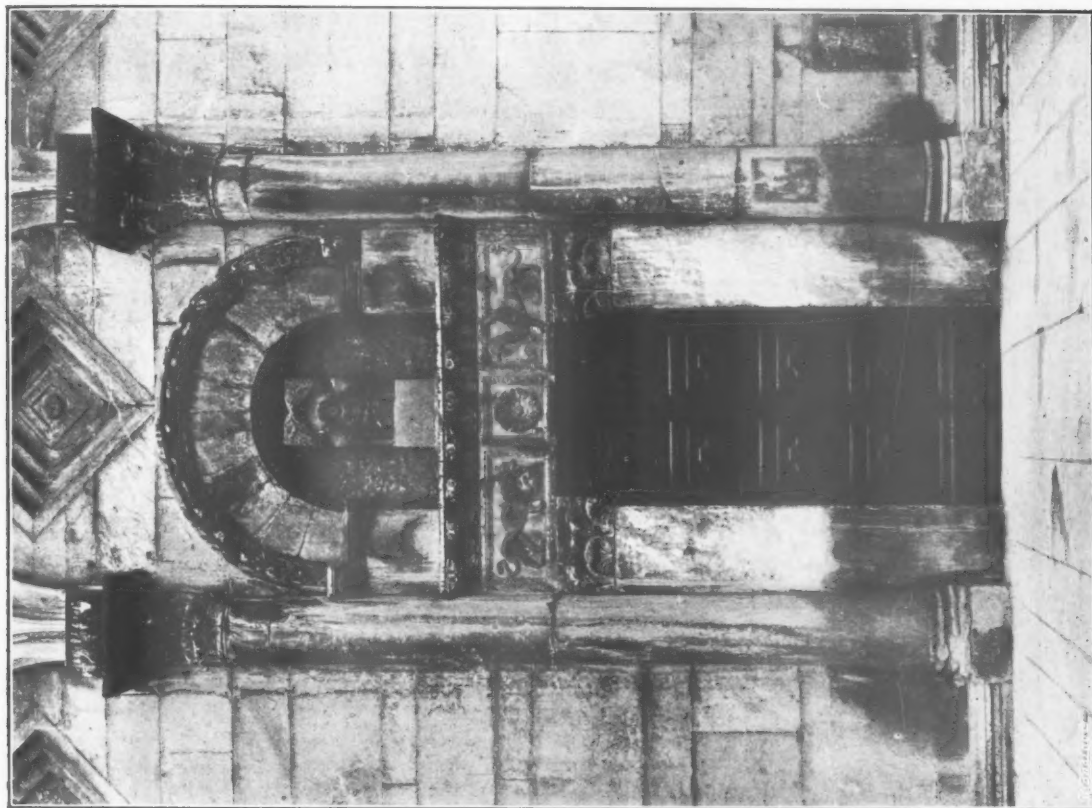
of height in such constructions. The door-jambs were treated as flat pilasters with projecting and sometimes richly floriated capitals. Over these was laid a deep and massive lintel, and it is this which, with its elaborate and deeply-cut foliage or figure subjects, forms such a strongly-marked feature in the ancient architecture of Lucca. Over this again the pilasters were repeated in a stunted form and with capitals less boldly marked, and from these, at last, sprang the simple round-headed arch which it had been the architect's purpose in all this storied underbuilding to carry as high as possible above the headway of the door. Here then we have a reason for the depth given to the great lintel stone, and for the presence of the smaller pair of pilasters which rested on it, while the remarkable sculpture generally found on the lintel and the mouldings, if no more, which served as capitals to the final pilasters was no doubt designed to reduce, if not remove, the somewhat clumsy effect of what was in fact a double stiling of the arch.

The Diecimo door* shows us the same arrange-

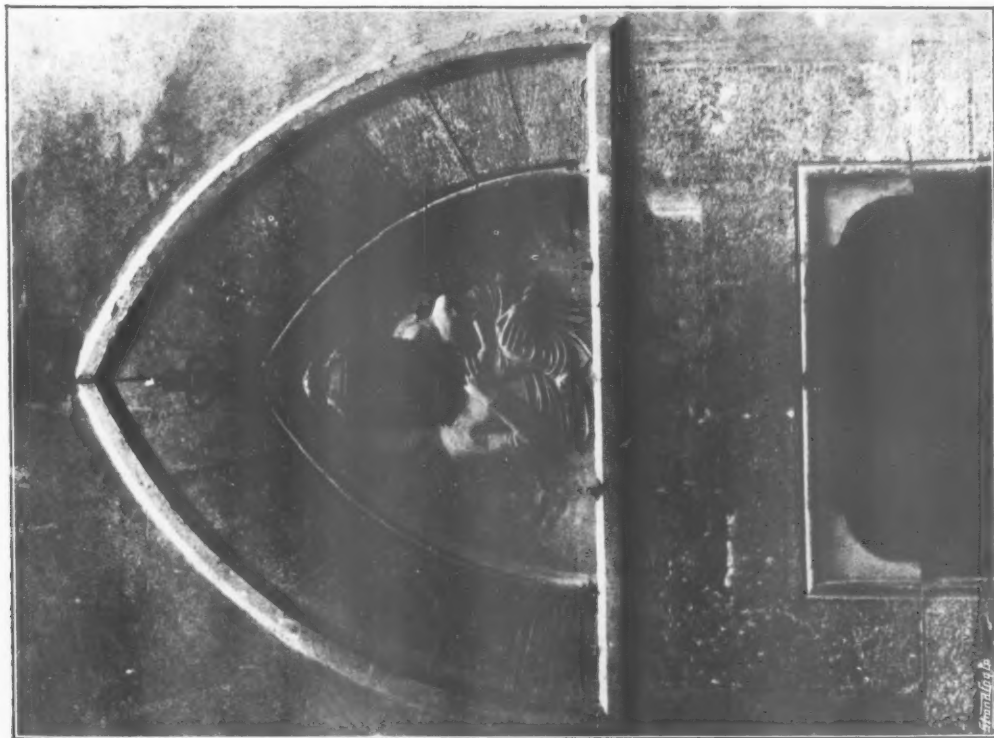
ment of parts, but in the simplest form, and stripped of all adventitious ornament, and it is particularly useful as helping us to see clearly the connection of the Luccese door-heads with the composite arches of Tuscany. Imagine that the doorway of S. Maria Forisportam has been chiselled to the absolute level of the wall-face, and you have a result exactly like what may be seen at Diecimo. In the latter example the jambs have lost their capitals, except at the angles of the doorway, where the simple brackets which still remain to support the lintel may certainly be held for a survival of them at the two precise points to which the reducing process we have supposed could not reach. Now such brackets under the lintel are a well-known feature in the older Tuscan doors—Florence has many examples of this arrangement—and it is therefore interesting to find at Lucca the fuller form of which they are the incomplete survival.

Nor is this all that may be learned at Diecimo. The severe plainness of construction seen here is carried out with consistence even in the door-head, where the simple Romanesque arch has neither carving about its extrados nor mouldings to mark where it springs. Thus nothing is left to mask the real nature of its building, and both the lintel

* This cannot easily be photographed, hence we have substituted for it in the illustrations a door of the same type which is found in the west face of the Torre delle Ore, Lucca, and will serve the purpose of this study equally well.



NORTH DOOR—S. M. FORISFORTAM, LUCCA.



DOOR OF BIGALLO—FLORENCE.

and what it immediately supports are seen for what they truly are: a stiling in two stages, meant to give height to the round-headed arch above.

Now just as the brackets of this door have helped us to understand those commonly found in such situations throughout Tuscany, so does the upper part of the same example throw light on what we are chiefly concerned with here: the varied forms of arch used in the Tuscan door-heads. Judged and interpreted by what is found at Diecimo, these horseshoe and Gothic forms, in all their varied combinations with the Romanesque arch and with each other, are nothing but attempts successively made to gain, with a new grace unknown to the older style, the same effect of height and proportion once sought in the studied stiling of a simple round-headed arch. That the new expedients were successful is seen in the fact that the builders who employed them were able almost at once to dispense with the help of that lavish ornament which their predecessors had so freely used to mask or relieve the clumsiness of the plan on which they worked.

Such a view of the matter may easily be confirmed by greater and more striking instances of what is essentially the same practice. At Pisa, for example, the Cathedral has Romanesque arches in the central nave, but in the aisles both arches and vaulting become pointed, and for a very obvious reason. The aisles are double, and the columns which divide them being a good deal shorter than those of the nave, it became a difficult matter to contrive arches and vaulting in the aisles which should combine well with those built to support the clerestory. Now the problem was solved not by stiling, but by introducing Gothic arches in the aisle arcades, and so carrying these up to a point where vaulting common to both might easily connect them with the round arches of the nave.*

Or take the case of the horseshoe arch. When at Lucca, in the opening years of the thirteenth century, a new porch was ordered at San Martino, the architect found his limits strictly defined by the projection of the Campanile on the south and the line of the Church wall on the north, while yet the arches he was to build must be made to fall opposite the three doors in the façade. The arch next the Campanile had perforce to be made smaller than the other two, and the architect, wishing in spite of this difficulty to gain something like a just proportion, or rather to mask as far as possible the want of it, has given this smaller arch more than something of a horseshoe

shape as the most graceful form of stiling which he knew or could contrive.*

A very singular example of the horseshoe arch is to be seen at Florence, which not only confirms the conclusion we have already reached, but shows considerable connection with the Lucchese stilings already noticed. The lower part of the façade of San Stefano of Florence has fortunately been left in its primitive state: it is commonly held for work of the twelfth century. The main door is set in a flat frame of black and white marbles laid in alternate horizontal bands. These become vertical wedges in the lintel, which is built in the form of a level arch. Above this rises a slightly-pointed arch to form the door-head. That is, the extrados is slightly pointed over a semi-circular intrados, and the peculiarity here is that the intrados so combines with the slanting lines of the lintel voussoirs as to be in them prolonged downwards through the lintel in the form of a horseshoe. So far, studying the intrados alone, we see that this result might be simply an accidental form unintentionally evolved in the course of construction. But when we pass to the extrados it is plain that what we have found here was a studied effect of art. The door-head arch is outlined by a shallow three-line moulding about the extrados. Now these lines are carried onwards and downwards through the depth of the lintel at the same inclination till a short horizontal return brings them to meet the corners of the doorway. Thus the horseshoe form stands out here as a clear intention of the builder. By a strange coincidence the iron-plated door below bears an actual horseshoe nailed upon it: the same which one story connects with the visit of Charlemagne to Florence in the opening years of the ninth century, and another with the death of Buondelmonte at the beginning of the thirteenth. For us it is enough to remember how we have found the lintel and horseshoe arch important elements in the stiling of door-heads at Lucca, and to notice that here at San Stefano of Florence these are singularly combined to serve the same purpose.

Before leaving San Stefano it may be well to notice another detail, which confirms in a remarkable way the view we are about to take of the real nature and history of the horseshoe arch. That it was invented as a peculiarly happy and ornamental mode of stiling the Romanesque arch, may be proved from the classic mode of its construction. In Spain, where, as is well known, this arch attained extraordinary development under

* Another and probably earlier example of the pointed arch, apparently used from mere delight in its form, may be found in San Paolo a Ripa d'Arno. It was evidently well known to the early Pisan builders.

* Other examples of the horseshoe arch at Lucca may be seen in the Annunziata Gate and—very remarkably—in the west face of the Campanile of San Pietro Somaldi. These, however, like the pointed arches of San Paolo at Pisa, would seem to have been built for no other reason than that of fashion or delight in the form for its beauty's sake.



DOOR OF TORRE DELLE ORE—LUCCA.

the Moors, only the upper part of the horseshoe—barely half the curve—was built as a true arch, that is, with radiating voussoirs. The rest, and in it all that is most characteristic of this beautiful form, was composed of stones or bricks laid level in the usual courses of the wall, but allowed to project more and more and dressed to the curve desired. Now this very form of construction may be seen at San Stefano. The intrados of the horseshoe, as we have noted already, needs and has no more than the inevitable lines of the lintel voussoirs for its definition. But the course of the moulding which prolongs the extrados and passes down through the lintel, cuts across the joints of stones laid horizontally and dressed at the ends to meet the angle of the first voussoir of

the lintel on each side. Thus here, as in the classic Spanish examples of this arch,* the horseshoe proclaims itself by its internal construction for what indeed it is; the most striking form ever given to the supports of a stilted arch.

Much that we have already noticed is now of service, if we choose to inquire whence it was that the Italians derived the arch forms which they used with such subtlety and effect. Not only the horseshoe arch at San Stefano, but the whole character of that doorway with its surrounding ornament is oriental, and that to such a degree as to suggest at once an influence of the

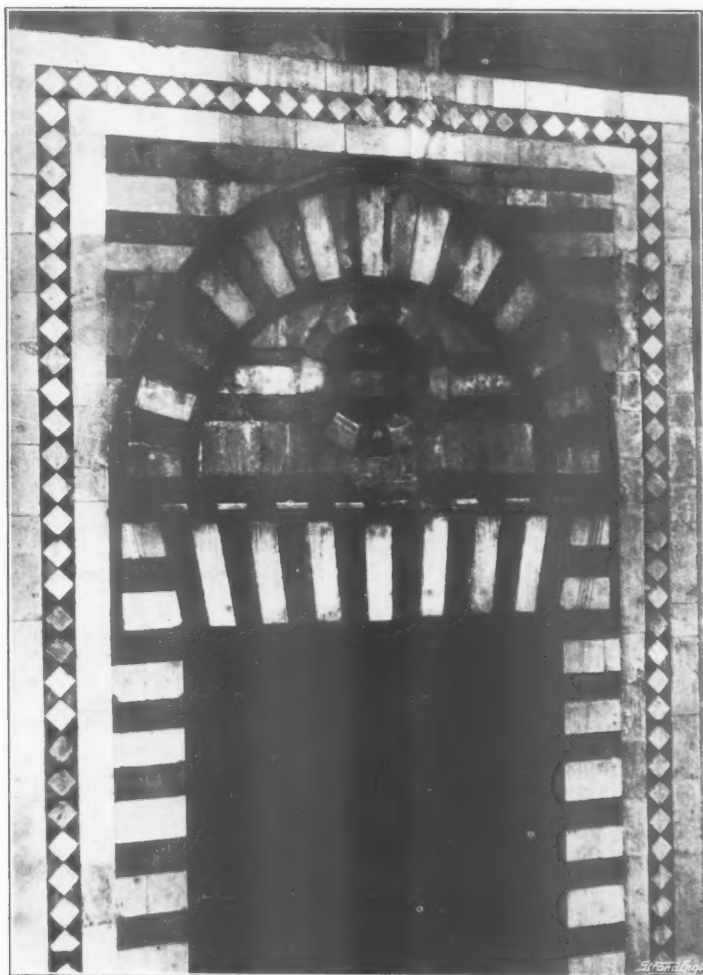
* Such as the Moorish gateway at Burgos, the Puerta de Justicia of the Alhambra, and the Puerta del Sol, Toledo, to mention only a few well-known cases.



SOUTH FAÇADE ARCH—SAN MARTINO, LUCCA.



EXTERNAL ARCH—PORTA DELL' ANNUNZIATA, LUCCA.



WEST DOOR—S. STEFANO, FLORENCE.

Saracenic architecture upon the Italian. And this idea is confirmed when we remember the geographical position of Pisa and Lucca, where the forms of the pointed and the horseshoe arch undoubtedly prevailed from early times. May it not well have been that like the silk and dyestuffs of the Levant these new and charming forms of arch here first reached Italian soil, and hence spread through the breadth of Tuscany, affecting Umbria on the south, and on the north even crossing the Apennines to Modena, where there is still a distinct trace of their early influence.* Thus our view would be, that so introduced, these forms of arch became early known over a considerable part of Italy, and were soon combined with the native Romanesque so as to result in the subtle and remarkable arches which we set out by describing.

* In the façade of the Duomo where we find a remarkable arcade of horseshoe arches.

Yet the matter is not quite so simple as this, and an enquiry into origins, however brief, would be faulty did it take no account of other facts pointing to a further and perhaps the ultimate source of at least one if not both of the forms in question. In the Baptistery of Venice is to be seen a carved slab of marble, which came from the early church built on that site in the first half of the ninth century. The carving betrays, as we should expect, a Greek chisel, yet on one face of the slab stands, clear and unmistakable, above a pair of columns with Byzantine basketwork capitals, the characteristic form of the horseshoe arch.* If then, by way of Pisa and Lucca, Tuscany and Umbria at large received from the Saracens elements of design which profoundly influenced their native practice, we are yet to look to Byzantium as the place where in all probability

* This slab has been figured and described by Cattaneo, "L'Architettura in Italia," Venice, Ongania, 1888, p. 250.



CAMPANILE ARCH, S. PIERO SOMALDI, LUCCA.

these forms were first tried since the Christian era and on European soil.

Think of the peculiar character of Byzantium in this connection: for, indeed, if architecture be the unconscious expression of an age's mind, this can by no means be left out of account. The capital of the Eastern Empire was founded to be a better and grander Rome. To surpass the glories of the West was the daily dream of those who lived by the Bosphorus. And surely, inevitably, this desire to surmount and surpass found its lasting expression in a new style of architecture—the Byzantine—when at last the serene height and beauty of St. Sophia's dome spread above supporting arches, whose form was still that of Rome. The triumph of the new style was not won in a day, however, nor reached without many an experiment, in which the builders of Byzantium strove for increased height in their arches before fixing on a dominant cupola as the best expression of their mind and the nation's spirit. In

Greece hard by, the tombs of prehistoric kings might have furnished them with the form, if not the true structure of the pointed arch, while our Venetian example shows that Byzantium knew, perhaps from Asiatic teachers, the effect to be gained by stiling in the form of a horseshoe the round-headed arch of Rome. Such devices, then, we may believe Byzantine builders had tried and had discarded. They do not enter into the substance of that style, which gains its effect of height rather by multiplying arcades one over the other to crown the whole at last with a wondrous dome. But though discarded at Byzantium, these forms were not forgotten nor lost, and at last, in the outskirts of that vast empire and by the banks of Nile, they had their renaissance, and came to their kingdom.

The Copts who served the followers of Mohammed, untrained yet in the arts, as the architects of their first mosques were under the influence of Byzantium, and in their work done for the new

conquerors appear for the first time in clear relief along with the Byzantine dome, the twin forms of the pointed and horseshoe arch. Well suited to a style which, while availing itself to the utmost of the profusion of marble columns which every ancient site afforded, aimed above all at an effect of lightness and height, these arches rose along the African coast far as the victorious Saracen pressed, till in Spain the horseshoe had the final advantage, and became in Moorish hands the characteristic note of a style not to be surpassed for dainty elegance. But all this may surely be regarded as but the subtle elaboration brought at last by Arabian minds to themes borrowed from Greek, and perhaps ultimately from Indian sources.

Much there is which must always remain difficult and obscure in every attempt to trace the ultimate origin of these architectural forms; but their nearer history grows increasingly clear, and the part which Italy played in their extension and development is plain enough. If Spain in her Moorish provinces may claim the perfection of the horseshoe arch and of the style which was founded upon it, France has undoubtedly the credit of first working out the possibilities of the pointed style, and by the banks of the Seine began what is generally called Gothic architecture. Yet Italy, as a natural consequence of her situation in regard to the nearer East, had the advantage of receiving these forms in their first and most direct importation. Her builders played with them out of sheer delight in their novel beauty, as in the south door-head of the façade of San Paolo at Pisa (pointed), or the campanile arch of San Piero Somaldi at Lucca (horseshoe); they used them as convenient ways of overcoming constructive difficulties as in the aisles of Pisa Cathedral or the porch of San Martino at Lucca; finally, in their hands these twin arch forms subtly combined and varied became the prevalent Tuscan fashion for the extrados of window and door-heads. At Siena, where perhaps this style reached its acme, and where, therefore, the chances of further

development were greatest, at least one church remains to form an indubitable link between the extremes we have been considering. Built during the twelfth century in the pointed style, it recalls on the one hand the Mosque of Fostat, and on the other carries us on to the developments of the pointed arch which took place on French soil. So near did Italy come to the glories of the Gothic style.

The reason why Italian architecture held a merely intermediate and subordinate place in the development of the pointed arch is plainly to be seen in almost all the examples we have noticed in this paper. When the forms of the pointed or the horseshoe arch reached Italy they were used by the Italians either out of mere delight in their ornamental effect or in their strict subservience to the round arches of the native Romanesque. Never does it seem to have entered Italian minds, unless for a brief moment at Siena, that the fundamental form of an arch could be other than the semicircle. Pointed as a leaf above, or bent to a horseshoe shape below, the line of the extrados during all these centuries was a thing to be played with at will, while still, beneath, the intrados stood fast in the stubborn form and force of ancient Roman building. Even when, dazzled for a little by the imported glories of Milan and Assisi, Italian builders yielded so far as to dream a brief Gothic of their own, the style was in decadence almost as soon as born, and carried in itself clear signs of the coming age. The door-head of the Florentine Bigallo, altogether pointed in form, is still by the lines of its voussoirs structurally Romanesque, and precious, therefore, as showing the last stronghold of the semicircular arch which expands hard by in the Loggia, where Orgagna (if indeed he built it) was bold to discard the cusped ornaments of his tabernacle in Or San Michele, and let his work stand free in the strength of the coming Renaissance. Roman, Romanesque, and Renaissance: these are the three "R's" of Italian architecture.

J. WOOD BROWN.

Current Architecture.

HOUSE AT WENDOVER.—This house has just been built for Sir Thomas Barlow, Bart. It stands in a bend of the downs, the entrance front looking north over the Aylesbury plain. The piers and railings (shown in the view of this side) will be connected with the house by yew hedges when the laying out of the grounds is completed. The south front will overlook a formal flower garden, backed by low hills. The house is built

of local red brick and flints, the stonework being Douling stone. The roof is tiled. Both bricks and tiles vary in colour, and are mingled at hazard, with the object of keeping the house as quiet in tone as possible, the site being bare of trees.

The architects are Messrs. Marshall and Vickers; the builders, Messrs. Webster and Cannon, of Aylesbury.

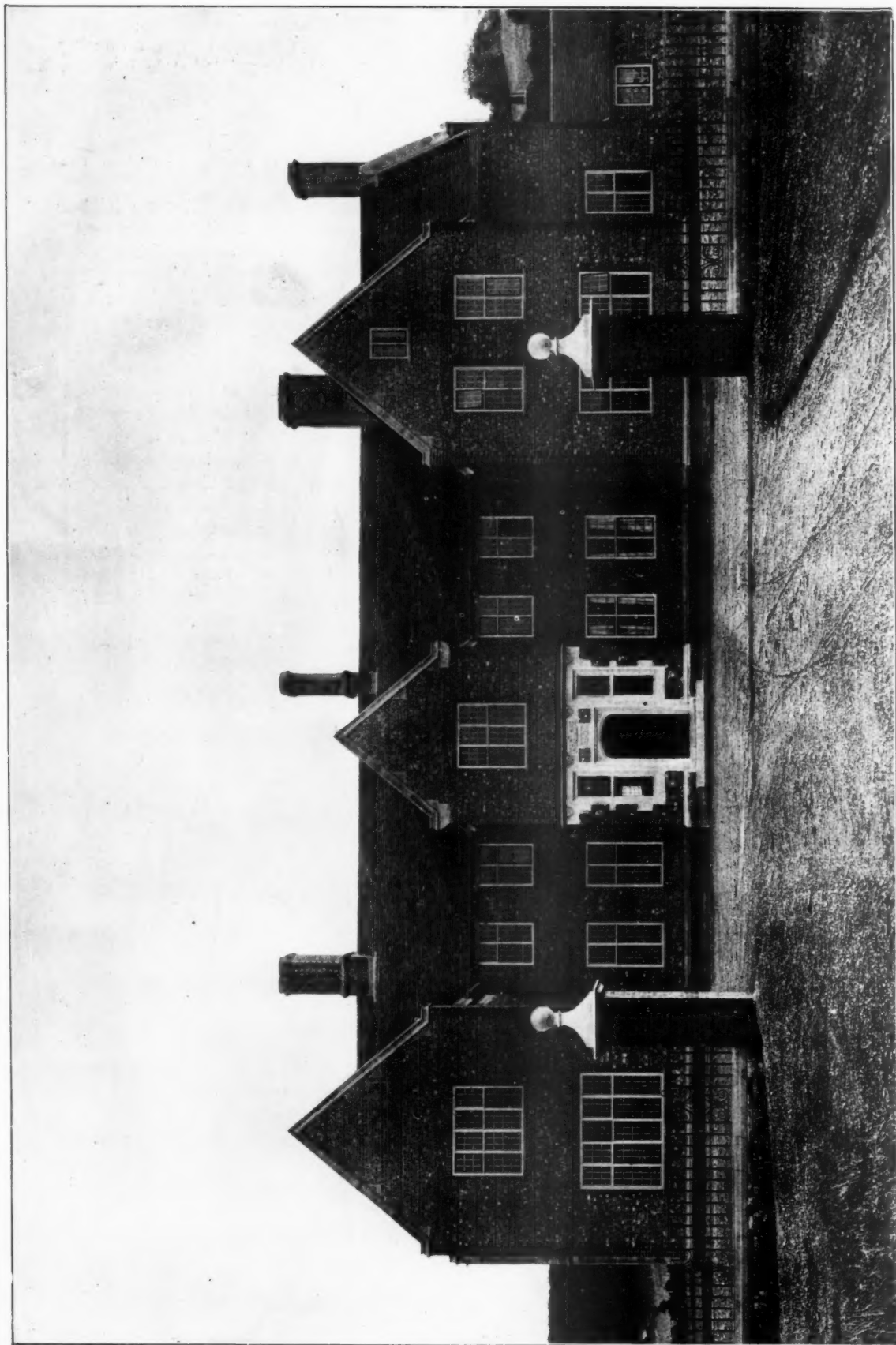


Photo: Bedford, Lemere & Co.

HOUSE AT WENDOVER, BUCKS. ENTRANCE FRONT.
MARSHALL AND VICKERS, ARCHITECTS.

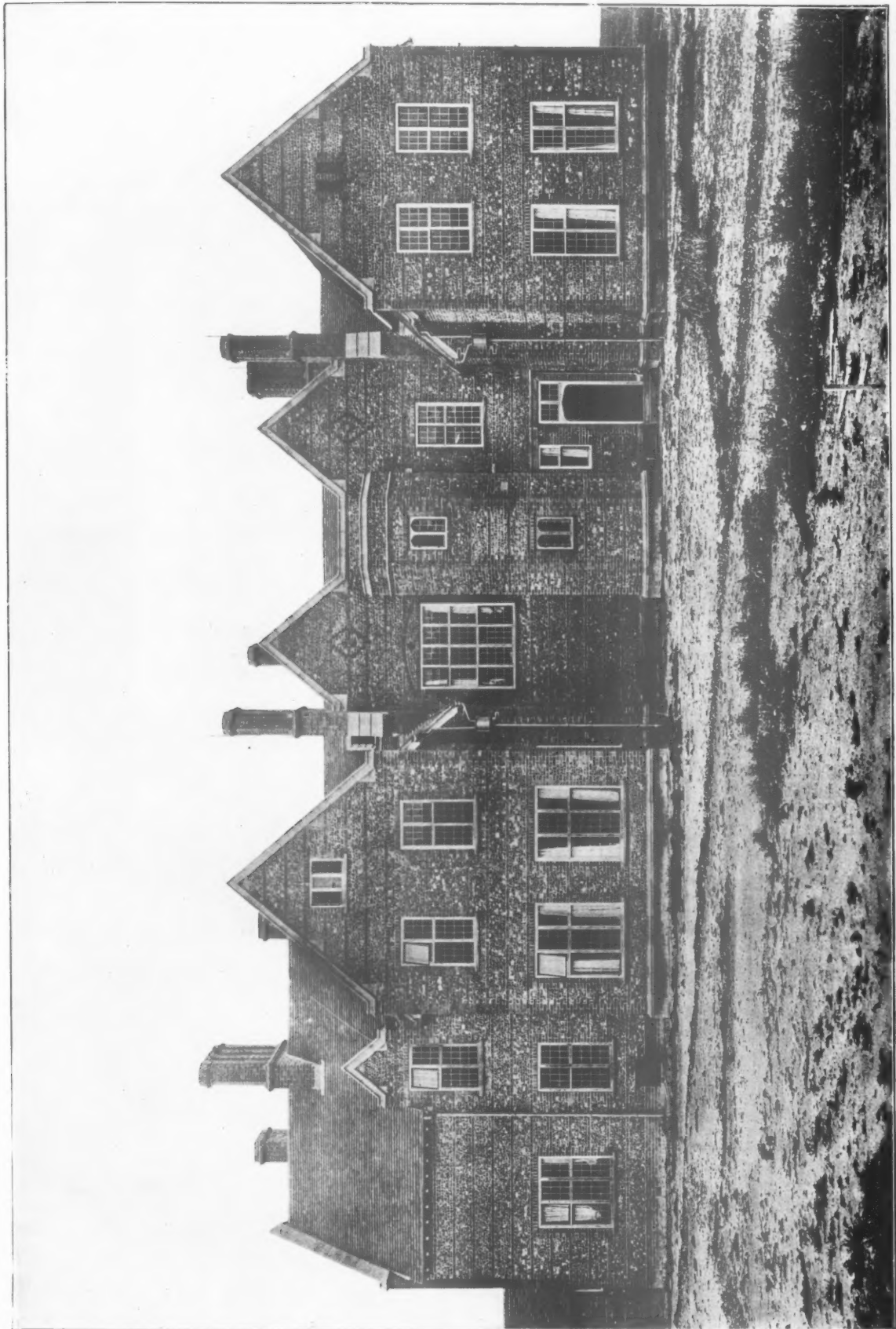


Photo : Bedford Lemere and Co.

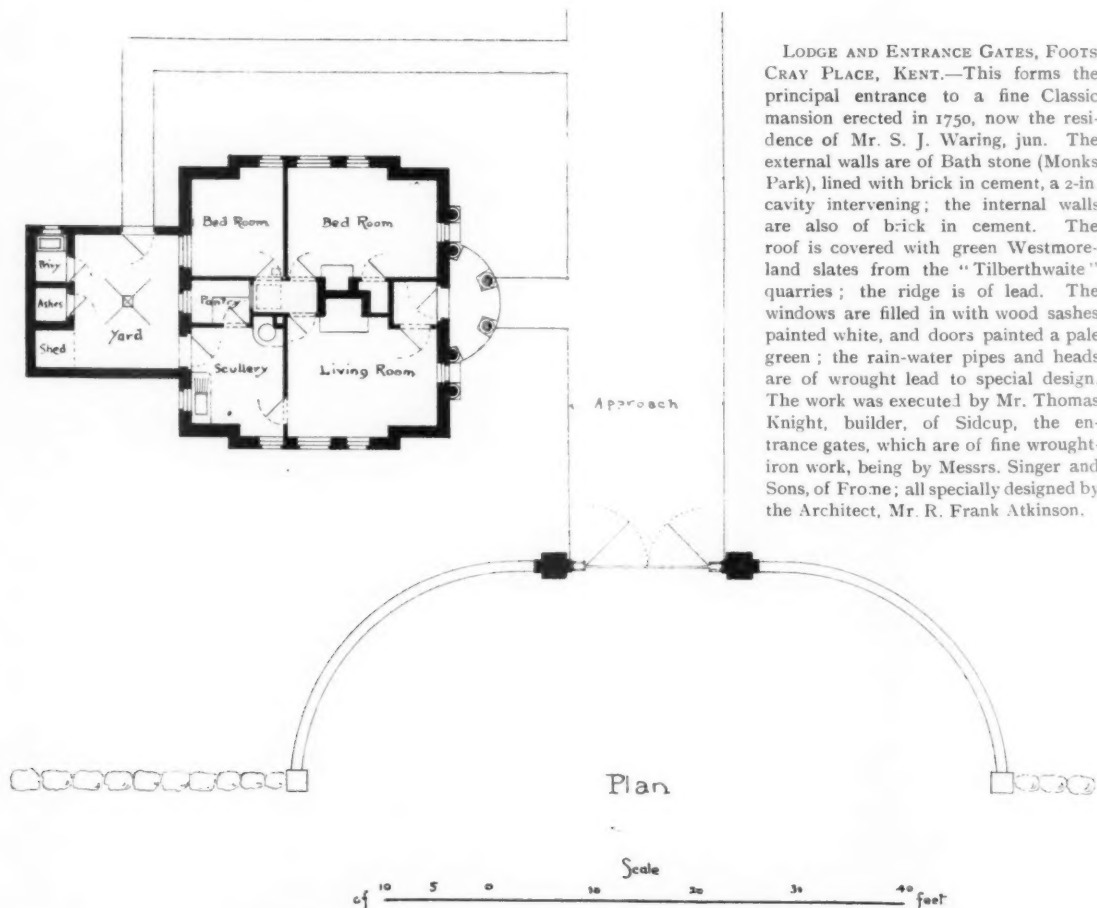
HOUSE AT WENDOVER, BUCKS. GARDEN FRONT.
MARSHALL AND VICKERS, ARCHITECTS.



GROUND FLOOR PLAN.



HOUSE AT WENDOVER, BUCKS.
MARSHALL AND VICKERS, ARCHITECTS.



LODGE AND ENTRANCE GATES, FOOTS CRAY PLACE, KENT.—This forms the principal entrance to a fine Classic mansion erected in 1750, now the residence of Mr. S. J. Waring, jun. The external walls are of Bath stone (Monks Park), lined with brick in cement, a 2-in. cavity intervening; the internal walls are also of brick in cement. The roof is covered with green Westmoreland slates from the "Tilberthwaite" quarries; the ridge is of lead. The windows are filled in with wood sashes painted white, and doors painted a pale green; the rain-water pipes and heads are of wrought lead to special design. The work was executed by Mr. Thomas Knight, builder, of Sidcup, the entrance gates, which are of fine wrought-iron work, being by Messrs. Singer and Sons, of Froome; all specially designed by the Architect, Mr. R. Frank Atkinson.

PLAN OF LODGE AND ENTRANCE GATES, FOOTS CRAY PLACE, KENT.
R. FRANK ATKINSON, ARCHITECT.

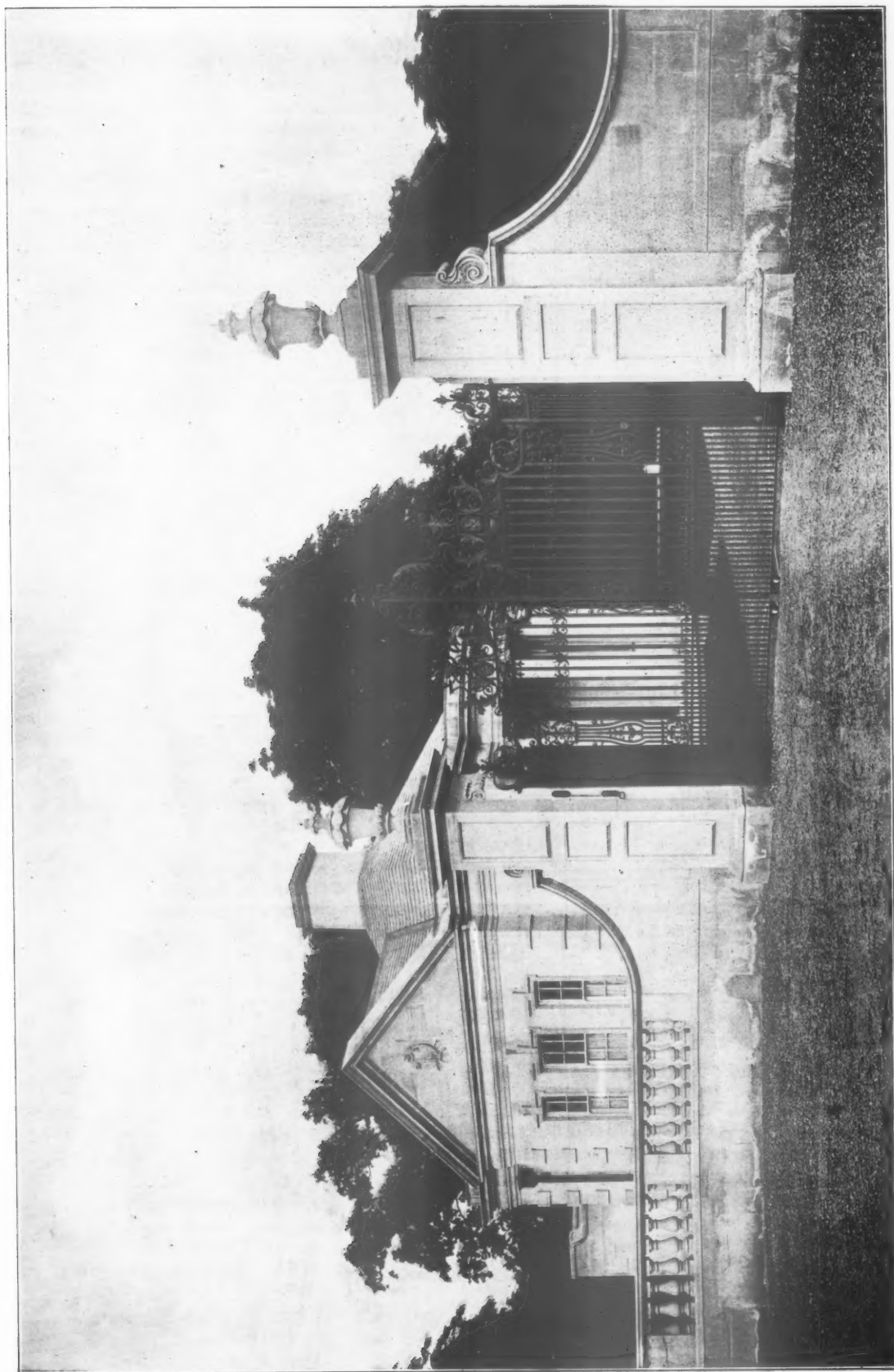


Photo: Belford Lemere & Co.

LODGE AND ENTRANCE GATES, FOOTSCRAY PLACE, KENT.
R. FRANK ATKINSON, ARCHITECT.

Books.

THE DICTIONARY OF ARCHITECTURE.

"A Dictionary of Architecture and Building: Biographical, Historical, and Descriptive." Edited by Russell Sturgis, A.M., Ph. D. In 3 Vols., price 25s. each net. London: Macmillan & Co., Limited.

THE "Dictionary of Architecture and Building," which Mr. Russell Sturgis and his fellow-workers have produced, is an unusually interesting and complete book of reference. The articles cover a very wide range, and the most important are written by men whose names are a guarantee of historical accuracy. The administrative aspect of the "business" of modern architecture has but an ephemeral interest, and might perhaps with advantage have been presented in a more condensed form. The only English work of the kind, "The Dictionary of Architecture," compiled by the Architectural Publication Society, has the disadvantage of being in six large volumes, and is not so well arranged for reference; its information on many subjects is moreover already a little antiquated. The aim of the new Dictionary is to be not only extremely handy and thoroughly up to date, but by means of "alphabetical arrangement carried to minute sub-division and cross-references in abundance" to make it easy for the student to obtain an outline of a subject, and also to compile a list of most of the works bearing on it.

Mr. Russell Sturgis and Mr. Robert Gibson deal respectively with the architect in America and England. These articles are concerned mainly with his training and functions as a "professional man"; we gather that in America he is nowadays "primarily the fiduciary agent whose business it is to administer the funds committed to his charge." In England he appears still to cherish the rags of tradition, and to attempt to "engraft upon the outgrowth of the living world as much as he can of a past archaeological flora, even at the sacrifice of some of the more modern tendencies." These generalisations may perhaps be considered more as representing to some extent the popular view than as a statement of facts. There is, as we know, a great deal of modern American work which proves that in reality the American architect takes his art seriously, and is as little disposed, as are English architects, to fill the rôle of entrepreneur. Indeed, Mr. Montgomery Schuyler, writing in a later article on the architecture of the United States, emphasises this point, and in criticising the modern country house claims that the American architect, by giving to material and methods of construction an appropriate architectural expression, has really developed a vernacular type "which, being of no style, yet has style." He even sees great possibilities in the "tall building," the qualities of which our insular minds have been slow to recognise, when the problems of construction are carried by serious architects beyond the point which now satisfies the "practitioners."

It appears, from Mr. Sturgis's article on bricklaying, that "trade customs" are not unknown in

America. There is, for example, an amusing little lament that the bricklayer's "custom" is to use the minimum of mortar, and this is defended on the grounds that unless there are interstices to allow the water to trickle away, the internal face will be affected! The "custom" is not wholly confined to America, but the slower wit of the English workman could never have invented so ingenious a defence.

The architecture of Asia Minor from the fifth century, B.C., to the end of the twelfth century, A.D., is dealt with in an interesting article by Mr. Phenè Spiers, who contributes also most valuable accounts of Imperial Roman, Persian, and Syrian work.

The origin, characteristics and history of Byzantine architecture are very ably treated by Professor Hamlin, who presents the subject clearly and concisely. He considers that the chief distinction of Byzantine architecture is "the revolution in structural design brought about by the invention of the dome on pendentives, and Sancta Sophia, its greatest achievement, as one of the really great buildings of the world." Owing, however, to the fact that the Eastern Empire declined before the culmination of the arts, it never carried the early principles of construction to their logical conclusion. Professor Hamlin also contributes other important articles on Indian, Moslem, and Scottish architecture.

Under the heading "Church" is given a useful list of the principal churches in Europe, with approximate dates of foundation, notable additions or re-building.

Mr. Lethaby, in his extremely suggestive article on modern design, lays down as a fundamental principle "the expressive use of materials for the satisfaction of worthy needs," and insists that old monuments should be studied as essays in practical building with a view to estimating the value of their structural methods for the needs and materials of to-day. We have been so much accustomed to study architecture from the archaeological point of view and to its presentation as an art of tabulated styles, that we have almost forgotten that its history is really a record of the struggles with problems of construction. The expression of the true constructional functions of columns, arches, vaults, domes, has inevitably shaped the building and confined the design or intention of their builders within the limits of this expression. It must not, however, be inferred that Mr. Lethaby is suggesting a retrograde movement, and advocating a primitive and rudimentary architecture, ignoring all that has gone before; he very truly observes that "Within the phenomena of the architectural styles there are certain large principles common to all vital periods, and it is these principles which will still form the positive conditions of modern architecture." And "he who at this time knows best what the constant spirit of past art has been knows best what its future may be."

To see ourselves as others see us is always instructive, and when that view is in the main so sympathetic as Mr. Clipston Sturgis's, there is little to cavil

at. His article on English architecture is a most able one. One gathers that the essentially English character of our national Gothic appeals strongly to his imagination, while that of France he considers a more logical, scientific, and complete art. He argues that the aims of the English cathedral builders and those of the French were different. He writes, "The first impetus of Gothic came as did that of Romanesque from across the Channel" (from Normandy, a country which he describes as "quite as much English as it was French"), "but like its Norman predecessor, it took on a distinct impress and character at the hands of the English. They showed no more enthusiasm over problems of vaulting than they had over the dome," and further, "in all the architectural history of England one must be impressed by the fact that architecture, as a science, was not practised in England, but that, as an art, it called forth the best energies of the Nation," but "with the French, Gothic was a scientific building, and their superb abilities were directed, were concentrated on the achievement of the perfectly balanced vault." There is doubtless much truth in this view, but "art" and "science" would seem to be too sharply opposed. The English domestic work with "its sobriety, directness of purpose, its unambitious qualities, and its lack of pretentiousness," receives its full measure of praise, but he is not sparing in his condemnation of the "superb foolish and wholly un-English work of Vanbrugh and the men of the early eighteenth century," with its open colonnades entirely unsuited to the English climate and its wasteful and often embarrassing symmetry, in fact he does not hesitate to condemn Blenheim as "a superb example of folly seeking vain-gloriously for fine effects, and neglecting wholly the fundamental aim of sound architecture." This wholesale condemnation of the English Renaissance work betrays a bias which, however natural, is a little out of place in a work of this kind. Of Inigo Jones and Wren he has little to say, but no record of architecture in England can be complete, which ignores the fine work of these masters, and lumps it with that of the amateurs and formalists who succeeded them; it had a most important influence, and set a type which was followed throughout the country, a type moreover which was definitely English. In his general summing up, Mr. Sturgis pays this flattering tribute to the national character of our architecture: "Notwithstanding shortcomings and faults, no country contains in itself a more precious architectural heritage than England; for, if it teaches no great lessons of art, it is yet instinct with all those qualities that have made England great, and every stone tells the history of a people who for all time have stood for freedom and justice, for honesty and uprightness." It seems a little ungracious in the face of such a testimonial to take exception to the opinion that our architecture teaches no great lessons in art. We are all probably agreed that the science of French Gothic was ahead of that of England, and experiment was indeed carried to the extreme verge of safety; but as an expressive building art English Gothic has cer-

tainly many lessons to teach. Mr. Clipstone Sturgis also contributes a short article on "English Romanesque."

Mr. W. P. P. Longfellow in his article on Greco-Roman Architecture, attempts the defence of the Romans against the charge of having tampered with the sanctity of the Greek orders; he does not deny the fact, but points out that the Romans were not artists in form as were the Greeks; they accepted "the orders" as their natural heritage, but could not be content with the limitations imposed by them; he considers, however, that the result fully justified the departure from strict tradition, and that Roman architecture is "a much greater intellectual achievement," "its problems were more complex and difficult, its conceptions grander, its combinations more inventive and interesting." Greek work was more limited in its range than Roman, but it is impossible to imagine anything more intellectual than its absolute purity and refined beauty. Having fixed upon the simple post and lintel treatment they were content to leave it at that, and lavish their best energies in a constant refining. They sought no fresh fields for the display of their building genius, attempted little that was complex. As Mr. Longfellow says, "The habit of cumulative design seems to have been foreign to the Greeks; of Roman architecture, as would appear, this was the strong side, and it is doubtful whether anything has surpassed the majesty of its great combinations." We need not defend the Romans for their vigour and want of delicate perception, nor apologize for the culture and refinement of the Greeks. The characters of both came out in their buildings, and it is quite natural to find them entirely different.

Professor Frothingham, jun., and Mr. S. Safford Fiske deal exhaustively with the architecture of Italy, and the fourteen articles treating respectively with Piedmont, Liguria, Lombardy, Venetia, Emilia, The Marches, Tuscany, Umbria, Latium, Abruzzi and Molise, Campania, Apulia, Basilicata, and Calabria review the work of each province historically and critically instead of dealing with the country as a whole. Italy is such a vast storehouse of art, and its phases of architecture are so many and various, that only by such an arrangement could any clear idea be given and the difficulty of overlapping be avoided.

Mr. Alexander Graham contributes a most useful article on the Architecture of North Africa, in which he says that notwithstanding the labours of many distinguished archaeologists, "there cannot be said to be any continuous history of North Africa as recorded by its monuments." The remains of the great structural works in Carthage he attributes to the Greeks, and considers that the fine arts were not indigenous; and although the streets of the old city are still unexcavated, all claim to a native architecture may be dismissed.

Mr. Russell Sturgis wrestles with the thorny problem of "Restoration," and the early part of his article seems almost to be an apologia for the restorer; "it was," he says, "natural to remove from a church of the thirteenth century an organ loft which had been

put up in the 18th; " later on, however, we have the sounder doctrine that " Buildings should be stayed up, fastened together, held in place," but nothing more; " no modern work whatever shall be put upon them in the way of rebuilding, carving, painting, or the like." This is, of course, excellent so far as it goes, but if nothing is to be added to falsify the history of the building, neither must its record be mutilated by removal; his view that on the whole the restorations of the great French cathedrals has been judicious can hardly be endorsed; many are, or have been, suffering a deliberate process of scraping and reworking. This passion for neatness and newness is gradually but surely destroying their value. Chartres is assuming a jaunty and youthful air. The priceless glass is being taken out, washed, flattened, and re-leaded. Almost everywhere this ruthless " restoration " is going on, and in a few more years the glory of many a fine building will be no more than a memory.

" Truth in Architecture," Mr. Henry Rutgers Marshall defines as " The expression, in design, of the essential facts of the plan and structure." He then goes on to say that although " there is a great æsthetic value in certain expressions of constructional function, to claim that the expression of constructional function is necessarily æsthetic is certainly impossible, for, were this true, all scientific engineering would have architectural value, which manifestly is not the case." It is doubtful if anyone has seriously claimed this, and it is quite true, of course, that an engineering work of merely mathematical exactness may have little or no æsthetic value; but French engineers, at any rate, have added to this scientific exactness a certain grace, an almost Greek refinement and nice adjustment of parts, and have produced iron structures, which, although we may be shy of calling them architecture, have nevertheless a distinct beauty " after their kind," a beauty as different from that of a stone building, as both the material and its possibilities are different. The conclusion he arrives at is that " this constructional and practical worth may quite properly be subordinated to other elements which are incompatible with it, provided that the latter, without it, are capable of producing æsthetic results which with it would be impossible of achievement." This seems to mean that the constructional expression may be ignored if it happens to interfere with a preconceived " design." It is difficult to understand how a building can be æsthetically satisfying when the expression of its chief function is deliberately subordinated.

The book is very fully illustrated by a large number of excellent photographs and drawings; many of the latter are of English origin and of familiar aspect. By a curious oversight, Nesfield, whose book " Sketches from France and Italy," has been very largely drawn upon, and whose position as an architect of undisputed talent gives him a place among the " Immortals," receives no biographical notice, although scattered throughout the Dictionary are many short accounts of the life and work of men of less eminence. The articles, as a whole, are adequate, and many of them are of exceptional interest.

Mr. Russell Sturgis has not only proved himself to be a most skilful and tactful editor, but has also contributed a great many useful and able articles, in addition to nine out of the ten devoted to the architecture of France; and he is to be congratulated on the completion of a work which contains much new matter, is excellently arranged, and is as complete on the scientific aspect of architecture, and the " professional practice " of to-day, as it is in everything dealing with its history.

ERNEST NEWTON.

FRA ANGELICO.

" Fra Angelico." By Langton Douglas. Second Edition, £2 2s. nett. London: George Bell and Sons.

ONE quiet Sunday afternoon in San Silvestro on Monte Cavallo, Michael Angelo was talking with his friends of religious painting, and he is reported to have said that " in order to imitate to some extent the venerated image of our Lord it is not sufficient merely to be a great master in painting, and very wise, but I think that it is necessary for the painter to be very good in his mode of life, or even, if that were possible, a saint, so that the Holy Spirit may inspire his intellect." We are persuaded that the great master had the Blessed Fra Angelico in his mind when he spoke these words, for the saying is true of him in both kinds—the master of San Marco was as good a painter as he was a monk; and we welcome this new edition of the Monograph by Mr. Langton Douglas because he says so; as far as we know, he is the first who has said so, plainly, since the time of Giorgio Vasari. Mr. Langton Douglas would not have us forget the judgment of the delightful biographer, for he quotes the words we are thinking of at the very beginning of the introduction: " Fra Giovanni Angelico da Fiesole . . . was no less pre-eminent as a painter and miniaturist than as a religious." Mr. Langton Douglas makes an excellent remark at the end of Note 3, pp. 89, 90: " Critics and commentators are too ready to conclude that they have convicted Vasari of inaccuracy." We should like to see this sentiment expressed under the middle paragraph of page 3, " And if a rich afterglow affected the imaginations of those Dominicans who in the succeeding age drew Fra Angelico's portrait, surely the colour that the picture thus gained would lose nothing at the hands of Giorgio Vasari! He was too fine a literary artist to spoil a beautiful story at the bidding of historical truth." We do not believe a bit of it. Vasari never darkened counsel with words: he told us plainly what he thought and what the gossips of the Florentine workshops thought, in all singleness of heart; mistakes he made, but they were due to slips of memory, to wrong information and to lack of time, for unfortunately he was very busy over his architecture and painting; let us not slander him by calling him a " literary artist " if that means saying

what he knew to be untrue. For our part we can believe all he tells us about Fra Angelico, down to the prayers he uttered whenever he took brush in hand. Surely many an artist to-day (not only the very saintly) must pray in secret for power to overcome the difficulties of his craft. We remember to have heard hurried cries for help out of the wrestle before their canvases, both to heaven, and—alas! that we must say it—to another place as well.

Mr. Langton Douglas guides us with devoted care through the long development of his hero as the artist adds grace to grace culled from Nature and the antique, beginning with the miniature-like painting of his early period, of which the Coronation of the Blessed Virgin Mary (No. 1,290) in the Uffizi is perhaps the finest example; and ending with the great histories of Saints Stephen and Laurence on the walls of the Chapel of Nicolas V. in the Vatican. No greater stride was ever made by any artist! Fra Angelico seems to have been developing to the very end of his long life, and to have died, a growing boy, at the age of sixty-eight. We are always astonished when we see the date of his birth—1387. Chronologically he was the very first of the great revivalists of the quattro-cento, and, as Mr. Langton Douglas points out, he led the van of reform, but with such a gentle spirit that the critics have often classed him as the last of the Giottesques. His reverent nature would not throw down all tradition at a blow, but choosing the best, especially in technique, he infused new life into worn-out formula. Let any artist make a drawing of one of the heads of the saints from the Perugia altar-piece, and he will at once be convinced of the true mastery of Fra Angelico, his subtle drawing and modelling, and above all his broad containing line. He was never a very powerful draughtsman, but for subtle line and character in young heads he holds his own with all later artists; among the latest an interesting comparison lies with the young Legros, in his religious works. Even the fine touch of Lorenzo de Credi ruined Fra Angelico's altar-pieces at San Domenico.

One misapprehension we must notice in the description of the Last Judgment, in the Academy, on page 51. The angels are said to be dancing "hand-in-hand" in the blessed fields full of flowers, whereas they are dancing hand-in-hand with mortals who have put on immortality, blessed souls clothed in bright raiment and crowned with wreaths of roses, white and red, one soul between every two angels. The angels may be known by their wings and heavenly halos. The ceremony appears to be that each soul shall be individually welcomed to the celestial fields by his guardian angel (we like to think); his angel leads him as partner to the "Ballo dei angeli," and on completing the round escorts him through rays of light to the Celestial City, the only exception being two souls of monks, a Dominican and a Franciscan (Saint Dominic and Saint Francis), who walk together in holy converse along the pleasant paths of Paradise. All this agrees even more closely with the glorious rondel, may we call it, of Jacopone da Todi, which

is rightly quoted in full, and might be printed in golden letters:—

"In quella rota vanno i santi
Et li angiol' tutti quanti—"

One other point we think Mr. Langton Douglas does not allude to, but it may be that his greater knowledge of the Giottesques silences him. We believe Fra Angelico was the first to illuminate heaven from the Source of all light. The light in his picture of the Risen Christ surrounded by His Saints (No. 663), in the National Gallery, radiates from the figure of Christ, the saints and angels on His right are lit from the right, those on His left from the left; and so also in the Coronation of the Blessed Virgin Mary (No. 1,290) in the Uffizi, the rays of light follow the engraved lines of the glory behind the Christ. As a rule Fra Angelico insists upon the Giottesque principle of lighting his wall-paintings from the light of the building in which they are painted to a most realistic extreme, as, for instance, in the very long cast shadows to the capitals of the pilasters in the picture of the Madonna of the Corridor in San Marco, where the faces too are lit with a raking light, anything but becoming, as if they were really standing there illuminated by the distant window at the end of the corridor. The good Frate was, however, in a difficulty when he painted the great Transfiguration in one of the cells near by. Here the supernatural personages are lit from the direction of the natural light, the window of the cell, and so are the three Apostles at the foot; the Saint Peter comes aright, for he is beyond the Christ, and the lighting does not contradict the glory of the Transfiguration; Saint John, however, is between the Christ and the window of the cell, but his face receives a strong reflected light from the glory.

All the wonderful light effects in these paintings in San Marco are produced by the simplest means, the Crucifixion in the Corridor, for instance, is painted with the fewest possible colours; the light grey plaster ground forms the greater part of the sky, landscape and middle tint of the light part of the robe of Saint Dominic, the shadows are lightly drawn in brown and the high lights put on with fine strokes of white, making as solid a monk as we could wish. The portraits of Saint Dominic at the foot of the Cross, so often repeated, are all different; can it be that they are portraits of the monks occupying the cells in the painter's time?

The Frate's naturalistic treatment of the naked human figure is religious in its exactitude, down to the very hair growing on the body, which is drawn and copied from nature hair by hair with a decorative devotion to truth, even in these pictures of the Crucified Saviour. Another instance of naturalism is the way the grain of the wood is differentiated in the crosses, and especially in the ladder used at the Deposition, in the Academy; the rungs are of a different wood to the uprights; the nails, too, in this picture are silvered to make them more real. The painting of the saints and angels in the frame of this picture is so beautiful that it may be compared to the painting of

the flowers in the frame of the Gentile da Fabriano opposite, but the Fra Angelico is as light as the Gentile is dark.

To date a picture from the architecture represented in it would, we fancy, be rather a dangerous expedient, but we confess it appears to lead to just conclusions in this instance. It is so easy for a painter to try fantastic experiments with bricks and mortar that he may sometimes record ideas of architecture before they were put into solid form, especially when architect and painter were the same person, as was often the case. We seem to remember classical details and even "obtuse-angled pediments" in Giotto, and pinnacles surmounted by classical statues.

We think it was unnecessary for Mr. Langton Douglas to depreciate the Florentine School "from Uccello to Michael Angelo," as he does in his "Conclusions" in order to exalt his hero. The works of these great artists are not to be circumscribed by our modern cant of pictorial and literary motives; as long as the scientific or even literary ideas are treated with the artist spirit they are good in painting, as, for instance, the perspective pictures of Pietro di Borgo and the fables of Bellini, to take other schools than the Florentine. Or, again, the wrestle of Hercules with Antæus by Pollaiuolo of that school—all depends on the way it is done.

The interesting pages referring to landscape art are not convincing to us, at least as regards the effects of distance; we do not feel the power of the third dimension of space in any Florentine work. Fra Angelico, Alessio Baldovinetti, and all of them, made

their distances by adding small quantities of white and grey to each plane as it receded; even the limitless atmospheres of Lionardo da Vinci affect us much in the same way as the series of planes of shallower and shallower relief in the gates of Ghiberti, and not as the actual space of Titian's backgrounds.

We quite agree with Mr. Langton Douglas in his contention that Benozzo Gozzoli had little to do with the frescoes in the Chapel of Nicolas V. Never in all his life, even in his best time, could Benozzo Gozzoli have designed such big backgrounds or such grand and simple figures as may there be seen, the final work of his master, Fra Angelico. Vasari was right when he described Benozzo Gozzoli: "Although he was not of great excellence as compared with many who surpassed him in design, yet he distanced others of his age by his perseverance, and among the quantity of works produced some are necessarily good," good to us that may mean; he painted at least something loved by each one of us, so we have a kindly feeling for him; but his crowded, crumpled towns and his ill-drawn grimacing figures are as unlike the frescoes of the chapel of Nicolas V. as the work of a devoted pupil can be unlike the work of his master.

We have tried to say what we can to support Mr. Langton Douglas in his contention that Fra Angelico was a good artist as well as a good man, and we are glad to see this second edition of his work, for we hope it means many converts to his teaching, and no better study than the art of Fra Angelico, in its purity and soberness, can be recommended to a distracted modern.

CHARLES HOLROYD.

Correspondence.

We insert the following correspondence relating to the articles on the Cathedral of Siena, (1) by Mrs. Richter (*THE ARCHITECTURAL REVIEW*, September, 1901) and (2) by Professor Langton Douglas (*THE ARCHITECTURAL REVIEW*, November, 1902).

I.—BY LOUISE M. RICHTER.

It has been said, and not without reason, that the Duomo of Siena is an edifice that bears the evidence of its date in itself. There is certainly no doubt that, like other sacred buildings in Italy, "it grew out of an earlier construction by successive modifications and additions."* We can only solve the question, *why* it has been built such as it stands before us now, by concluding that final results must have been quite unpremeditated in its original design. To what an extent some of the earlier elements of Gothic art have been grafted on the existing Lombard-Romanesque stock, is proved, for instance, by the ribbed vaultings which are brought together with functional groupings of support in the interior. Charles Herbert Moore, in referring to the Cathedral of Siena as the first in

date* amongst the more important Gothic buildings in Italy, goes even so far as to say that in the interior it exhibits no more advanced organic character than the naves of St. Ambrogio of Milan and of San Michele of Pavia—both supposed to have been built 200 years earlier. This amply proves how much the Sienese Cathedral has retained its Lombard-Romanesque character. But it is, therefore, none the less Gothic in its architecture, since it has been shown† that Gothic is an art, not only derived from Romanesque, but that it *is* Romanesque completely developed.

In default of reliable documentary evidence we must judge architecture by very much the same rules of art criticism that guide us in judging old pictures which bear no name and no date. The statement of Malavolti, a Sienese historian of the time of the Renaissance, that a *new* cathedral was begun at Siena in 1245, has no other documentary support, except that money was spent on the Duomo and workmen paid in

* "Development and Character of Gothic Architecture," p. 275.

† Charles Herbert Moore "Development and Character of Gothic Architecture," p. 9.

* Norton "Historical Studies of Church Building," p. 91.

1246. This, according to an entry in the *Nuovo Documenti**, may just as likely imply that alterations with regard to that building were energetically taken in hand at that time. There is certainly no evidence to prove that the old Cathedral, which had been dedicated in the 12th century by the Sienese Pope Alexander III., was entirely demolished so as to make room for a new cathedral,† as has been surmised by Mr. Langton Douglas and other writers on Siena. The evidence that "Stilkritik" affords us, lies, in fact, much rather the other way. It tells us that in Siena, as was the case with so many other cathedrals in Italy, the Duomo underwent a gradual process of modification and alteration, and that the earlier Gothic elements, such as are perceptible in the interior of the church, must have been engrafted on the older structure long before 1245, and even before the Cistercian monks built the Abbey churches of Casamari and Fossanova. The same tale is told by the Campanile built upon the solid foundations of one of those towers of defence which in the mediæval times formed so essential a part of the city.

When the Cistercian monks came to the neighbourhood of Siena to build the abbey church of San Galgano, some of them, as is well known, were subsequently summoned to Siena to act as architects of the Siena Cathedral. Not, however, to transform it after the model of their church at San Galgano, but simply to go on with such alterations as had been begun and carried on by earlier architects. It was then that some elements of the Burgundian Gothic were introduced, now chiefly perceptible on the exterior of the building.

With Giovanni Pisani came the Pisan influence, so evident in the decoration of black and white marble. Later on, in 1315, in order to add a new choir, an enlargement towards the eastern side of the cathedral was resolved on, and at the same time also the building of a new baptistry, which was to be like the old one, an integral part of the Cathedral. This work, begun with great energy under Camaino di Crescentino, was at one time interrupted, but boldly brought to completion about 1333, in spite of serious territorial difficulties. We may, therefore, fairly surmise that also the choir, so essential a part in the functions of the church, was completed under Camaino di Crescentino, who, according to Milanesi, remained in the service of the Duomo until 1338.‡ This does not, however, exclude that later on again alterations may have been undertaken with regard to the choir, and not completed till 1370, as Veri di Donato, not always a reliable chronicler, states in Muratori.

So anxious were the Sienese to outvie Pisa, Lucca and the rival city Florence, that again in 1339 they decided that a new Cathedral should be raised. But here again the plan was not entirely to demolish what already existed, but was to be limited to the construction of a new nave with double aisles on the southward

side of the old nave, which was thus intended to be converted into a transept. This huge plan, however, was, as is well known, doomed never to be carried out.

We may finally state that in Siena, perhaps more rapidly than in any other Italian Cathedral, did the northern Gothic subsequently develop into what is generally styled the Italian Gothic, that lofty and serene architecture which, instead of superseding its predecessors, rather clung to the older lines, crowning the rounded arch with the pointed gable.

But how well the Sienese architects knew also to create the so-called purer Gothic, is shown by the eastern much more than by the western façade of their Duomo, and more especially by those noble ruins on the south side, now the only record of what might have been the finest Gothic temple in Italy.

II.—BY LANGTON DOUGLAS.

IN my article on Siena Cathedral,* I called in question two statements of Mrs. Richter in regard to that building. I also mildly complained that she had quoted a document not quite accurately, when, in fact, she had made six mistakes in transcribing a passage but five or six lines in length. The first assertion of hers that I disputed was this:—"The Cathedral of Siena is the oldest Gothic building in Italy; as such it marks a new era in the history of Italian architecture, and with it the Gothic style makes its first appearance on this side of the Alps." Whatever signification be assigned to the term "Gothic," this statement, I hold, is indefensible.

The Cathedral of Siena, as Mrs. Richter agrees, is a Romanesque structure upon which certain Gothic elements were superimposed. Documents prove that none of these purely Gothic elements—that is to say, the clerestory windows, the external decoration, and the façade—were of an earlier date than 1259. And, as the tyro in the study of Gothic architecture knows, the Gothic churches of Chiaravalle di Castagnola and Fossanova were then more than half a century old.

Mrs. Richter now contends, however, that the earlier structural portions of Siena Cathedral are Gothic because they are Romanesque. "Gothic," she quotes—and in a sense the statement is a truism—"is but Romanesque completely developed." Therefore, she concludes, it is right to call a Romanesque church "a Gothic building." It might just as reasonably be argued that it is right to call an ape a man, or a chrysalis a butterfly. But let that pass. Let us admit for the sake of argument that it is right to call a Romanesque cathedral a Gothic building, and let us further admit—an opinion I hold to be even more erroneous—that the old twelfth-century church was incorporated in its entirety in the thirteenth-century Duomo. All this being granted, it yet remains indefensible to say that with the Siena Cathedral "the Gothic style makes its first appearance on the southern side of the Alps." For there are many North Italian buildings in which are to be found all

* "Nuovo Documenti di S. Borgese and L. Baulei," p. 4.

† Langton Douglas, "History of Siena," p. 273.

‡ "Milanesi Documenti" Tomo I., p. 183.

* THE ARCHITECTURAL REVIEW, December, 1902.

the principal elements common to the Lombard-Romanesque and the Burgundian-Gothic styles, which are of a much earlier date than the earliest assigned to the existing Cathedral of Siena.

The second statement of Mrs. Richter which I objected to was her assertion that the choir of Siena Cathedral—the existing choir above the Baptistry—was finished before 1318.* From the year 1310 to the year 1318, Camaino da Crescentino was the chief architect of the Duomo. After that date, up to his death in 1338, there is evidence to show that he received at least occasional employment from the *Operai*, but he no more directed the work upon the Cathedral and Baptistry. Mrs. Richter runs away from her former statement, and now maintains that the choir was finished, not in 1318, but about 1333. But this revised conclusion is as erroneous as her original statement. For there is clear documentary proof that the choir above S. Giovanni was yet unfinished in 1356. In a document of that year, Domenico d'Agostino and Niccolò di Cecco, two distinguished architects who had been consulted by the Sienese authorities, advised the *Operai* “to complete the addition which is above San Giovanni, on which men are now at work.”†

Mrs. Richter attempts to strengthen her untenable “surmise” by unjustifiably throwing discredit upon Neri di Donato's veracity. She is probably not aware that Neri was living in Siena at the time when the present choir and façade were being built, and that he took an intelligent interest in the architectural work that was being carried on. Neri is in the best sense of the term, a first-hand witness, for he was a diarist rather than a chronicler; and no competent historian capable of dealing with documentary sources has ever regarded him as an unreliable authority on the local events of his own time.

Mrs. Richter again shows an inadequate knowledge of the documentary evidence relating to the history of the Duomo, in her reference to the great unfinished cathedral that the Sienese planned in the fourteenth century. She states that this plan was “limited to the construction of a new nave.” That, it is true, was the original plan, but it was soon found to be impracticable: it was discovered that, in order to complete this new church, it would be necessary to pull down the campanile, the cupola, and all the vaults of the old church.”‡ It is always a matter of surprise to me that practical architects could ever have arrived at any other conclusion. This work of destruction was never carried out. For the Sienese were unable to realise their great plan, and they

decided to complete and to beautify the older Duomo, the present Cathedral.

It is possible that some portion of the twelfth-century church, of which I have spoken in my *History of Siena*, was incorporated in the great cathedral which the Sienese began to build in honourable rivalry with neighbouring cities, in the great age of the communes, the thirteenth century. But both documents and *stilskritik* alike, show that but a very small part of the church Alexander III is said to have consecrated, can have been embodied in the thirteenth century edifice. The application of *stilskritik* has led those architectural experts of America, France, and England who have written fully upon the subject of Siena Cathedral, to speak of it as a thirteenth century building. Moreover, Mrs. Richter herself, in her *Siena*, published in 1901, speaks of the “new church”* that the Sienese began in “the thirteenth century.” This conclusion she herself arrived at by the methods of *stilskritik* after two lengthy periods of residence in Siena. And it is this new church that she said was “the oldest Gothic building in Italy.” Rather than confess her mistake, she now denies the results of her previous prolonged study of the Duomo; and, although she has not, I understand, visited Siena since her book was published, advances the theory that a great part of the twelfth-century church was preserved. For the same reason, she includes the Romanesque style under the term Gothic.

But, in reality, Mrs. Richter still gives the existing “Gothic” church a later date even than I do! In my article I showed that the employment of layers of black and white marble which prevails in the most essential parts of the structure of the Cathedral was due to Pisan influence.† Mrs. Richter now seeks “to go one better,” if I may say so without discourtesy, and asserts that this feature in the Cathedral is due to Giovanni Pisano!‡ Mrs. Richter's use of *stilskritik* leads to curious results. She admits that the pointed windows of the clerestory were the work of Cistercian architects, and were built between 1259 and 1272. But the striped piers which support the clerestory were not completed, she holds, until after 1288, the year in which Giovanni Pisano was appointed chief architect. From which it follows that an application of critical tests leads to the conclusion that Siena in the thirteenth century was a kind of topsy-turvy land, and that the building of the Duomo began at the top.

* *Das neue Gotteshaus*—Richter, *Siena*, 1901, p. 34.

† See THE ARCHITECTURAL REVIEW, November, 1902, pp. 183 and 184.

‡ Contemporary documents prove that these stripes were in existence long before Giovanni Pisano was born. In my *History of Siena*, and also in my article in this REVIEW, I stated that the date when the thirteenth century church was begun was unknown. I have now in my possession documentary evidence, which I shall shortly publish, pointing to the conclusion that this church was begun in the third decade of the thirteenth century.

* Richter: *Siena*, Berlin and Leipzig, 1901, p. 37:—*Unter Camainos Leitung (bis 1318) scheint der Chorbau zu ende geführt zu sein.* . . . Fortunately Mrs. Richter's admirable account of Sienese art contains few mistakes of this kind.

† Arch. di Stato, Siena, *Arch. dell'Opera del Duomo, Libro di Documenti Artistici*, Documento, No. 5. See Milanese, *Documenti*, Tomo I., p. 252.

‡ See the document referred to above. Milanese, *op. cit.*, Tomo I., p. 252.